School Board Journal

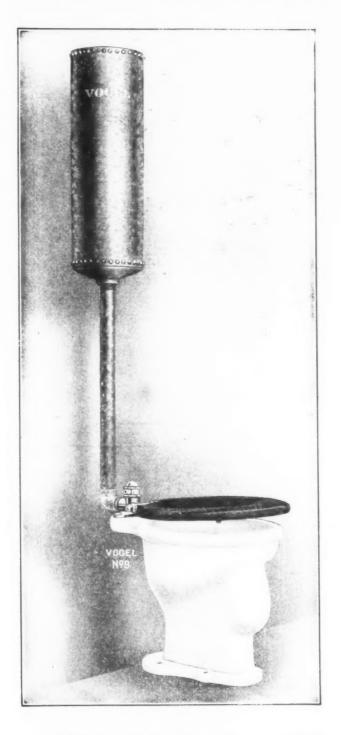
A PERIODICAL 90 SCHOOL ADMINISTRATION



December, 1927

The Bruce Publishing Company, Milwaukee, Wis. 

Number 9 Automatic School Water Closet



This closet is made to stand the rough usage of the school water closet.

Economical in the use of water.

Seldom requires repairs.

Easy of access when repairs are necessary.

The simplest and most durable automatic water closet.

Many Thousands in use.

Sold by Wholesalers of Plumbing Supplies Everywhere

JOSEPH A. VOGEL CO.

Wilmington, Delaware

St. Louis, Missouri



NATURAL SLATE BLACKBOALDS

Natural Slate Blackboards installed in 1851 in Norristown, Pa., are still in daily use.

Natural Slate Blackboards installed in 1863 in Philadelphia are still being used every day.

It is records like these and many more that prove their extraordinary durability.

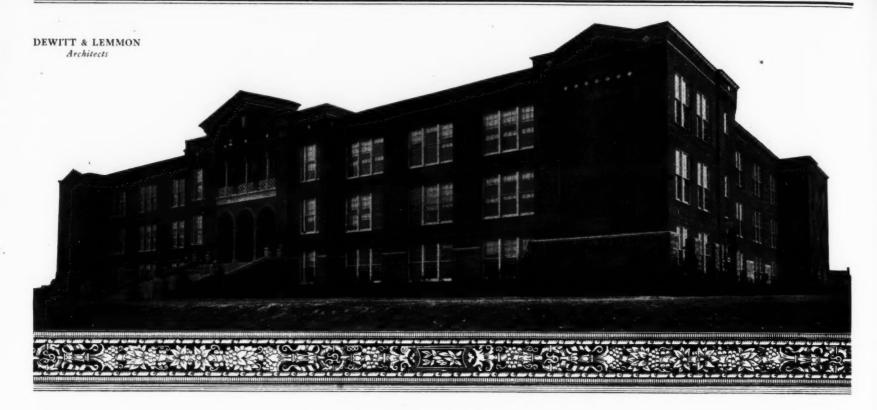
Natural Slate Blackboards are Easy-to-write-on . . . Easy-to-clean . . . Sanitary . . . Dustless . . . Fireproof . . . Permanent . . . Economical. They meet all requirements of the modern schoolroom.

No matter how long after installation, no matter how hard they are used, Natural Slate Blackboards are always like new. Their first cost is their only cost.

~ D

NATURAL SLATE BLACKBOARD COMPANY—108 ROBINSON AVE., PEN ARGYL, PA.

BOSTON CLEVELAND KANSAS CITY BUFFALO MEMPHIS CHICAGO ST. LOUIS PITTSBURGH NEW YORK CITY MINNEAPOLIS TORONTO WASHINGTON CINCINNATI



SUNSET HIGH SCHOOL, DALLAS, TEXAS Is Equipped With JOHNSON HEAT CONTROL

The certainty of Johnson value and operation, the conveniences and comforts and temperature evenness obtained, and the fuel economy of twenty-five to forty per cent derived—are why. And these same reasons are why your school buildings too ought to be equipped with Johnson Heat Control.

The Johnson Dual Thermostat System Of Heat Control is especially valuable in school buildings where night classes, for instance, are conducted: At the close of the day sessions, between three and four o'clock in the afternoon, the school principal or janitor by operating a switch in his office can turn down the steam in all of the rooms not to be used at night, and leave the steam on only in the rooms that are to be used. The next morning by operating the same switch he turns the steam on in ALL of the rooms for the day. Thus fuel is consumed at night only for the rooms occupied, instead of the entire building.



And thus the school's peak fuel consumption is stopped as soon as final day classes are dismissed: between three and four o'clock in the afternoon.

Going from room to room to turn off the steam for the night and repeating the same routine to turn on the steam every morning is likewise disposed of. Briefly, such are the functions and advantages of The DUAL THERMOSTAT, now in The Johnson System. Confer with our engineer in your city or vicinity: or write to us for complete details of construction, operation, and results.

JOHNSON SERVICE COMPANY

MAIN OFFICE AND FACTORY: MILWAUKEE, WISCONSIN, U. S. A.

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KEWANEE STEEL-Riveted BOILERS

What price should be paid for a heating boiler?

The cost of a boiler depends on the heating service expected.

And the necessary factors of construction to insure that heating service must be builting the boiler.

So the purchase price must permit putting into it, the necessary material, both in quality and quantity, to

tear in the service demanded. Of course the name of the maker should be a guarantee of workmanship and his reputation an assurance that all requirements of design for efficiency have been fulfilled.

With a Kervance Steel-Riveted Boiler you may be sure of getting not only full value for your purchase money but also the benefit of substantial upkeep savings, both in fuel and in repairs, year after year.

Cost

KEWANEE BOILER COMPANY

Kewanee, Illinois

Branches in Most Leading Cities

STEEL HEATING BOILERS RADIATORS WATER HEATERS TANKS AND WATER HEATING GARBAGE BURNERS

SPENCER VACUUM CLEANING SYSTEMS



CLEVELAND HEIGHTS HIGH SCHOOL, CLEVELAND HEIGHTS, OHIO. Franz C. Warner and W. R. McCornack, Architects.



THOMAS SNELL WEAVER HIGH SCHOOL, HARTFORD, CONN. Frank Irving Cooper Corporation, Architects.

The Universal System

The recommendations of our Engineering Department may be obtained on any cleaning problem without cost or obligation.

There is still time to equip existing school buildings during the summer vacation if action is taken promptly.

Due in part to the inherent characteristics of the multi-stage turbine and to the correct design and proportions of the system as a whole, Spencer equipment produces the right proportion of vacuum to volume at the end of the hose, for both bare floor work and carpet work, which proportion is automatically changed as often as the operator changes from one class of work to the other. This proportion remains uniform not only for different kinds of cleaning, but also for different distances from the machine, representing the same efficiency on the top floor as on the ground floor.

The Spencer System is therefore a universal cleaning system operating with uniform efficiency regardless of the distance or nature of the cleaning.

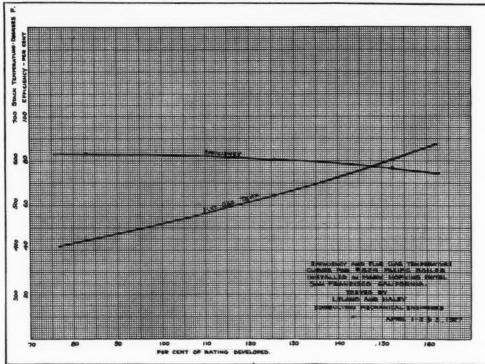
A system of rugged construction—the Spencer is a machine of great simplicity and durability. There are no valves, belts or other complicated parts requiring constant adjustment or repairs. The cleaning appliances and tools are few, simple and strong—all wearing surfaces easily, quickly, and inexpensively replaced.

Write for list of school installations and complete data regarding Spencer equipment.



THE SPENCER TURBINE COMPANY HARTFORD, CONNECTICUT

Flue Gas Temperature Only 600° F. at 152% of Rating



Actual operating test reveals remarkable ability of the Pacific to utilize heat of combustion gases.

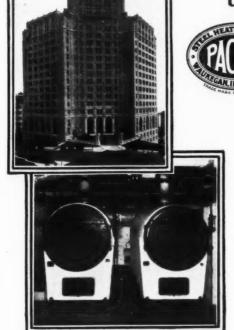


In the Pacific, the heat of the burning fuel is used in making steam and not wasted up the stack. This fact was demonstrated once for all in the notable test conducted by Leland&Haley, well-known Mechanical Engineers, for the Mark

Hopkins Hotel at San Francisco. In the test, the flue temperature ranged from 422° F. at 82.8% of rating (normal operation for this building with only one boiler in the line) to only 603° at 152.4% of rating, under a heavy fire.

These figures are doubly significant because they were obtained by independent engineers under actual operating conditions, five months after the boilers were placed in operation. Get the complete story, including certified report, in the Mark Hopkins Hotel Test Booklet. Sent upon request.





Mark Hopkins Hotel, San Francisco. Geo. D. Smith, Managing Director. Weeks & Day, Architects, Leland & Haley, Mechanical Engineers, Knittle Bros., Heating Contractors. Two No. 824 Rear Oil-Fired 14000 square foot Pacific Boilers installed.



Self-Releasing Fire Exit Latches

Sweets, Pages B1876-1879.

AIA 27c5

Probably the most nearly perfect joy is that of creating a supremely fine thing--whether a painting, a building, or a fire exit latch.

VONNEGUT HARDWARE CO. Indianapolis, Ind. 1852 Anniversary 1927





High School, Wichita, Kan.

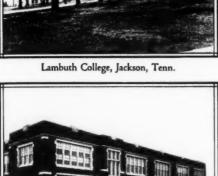


Taylor Alderdice High School, Pittsburgh



St. Joseph's College, Cupertina, Cal.





Robinson Public School, Detroit, Mich.



Science Hall, Univ. of Idaho



De Soto High School, Poplar Bluff, Mo.

Shading the nation's windows

THE success of *Columbia* Window Shades and Rollers is not confined to any one section of the country. Consider the group of schools shown here. This assemblage includes some of the most notable school buildings erected in this country.

To have been selected for so many buildings of this calibre is the most convincing "Certificate of Merit." *Columbia* Window Shades *must* be good-looking, durable and smooth-running—or they would not have been specified for so many of the nation's important educational institutions.

And *Columbia* prices must be right. As you know, on large and important installations such as these, equipment is bought on a strictly competitive basis. Any manufacturer who attempted to overvalue his product would have small chance of receiving this distinguished "Certificate of Merit."

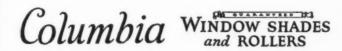
The Columbia Mills, Inc.

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 San Francisco
 Seattle





Delgado Central Trades School, New Orleans



Columbia Heights High School, Minneapolis



Russell Sage Dormitory, Dartmouth College



Beaumont School, Portland, Oregon



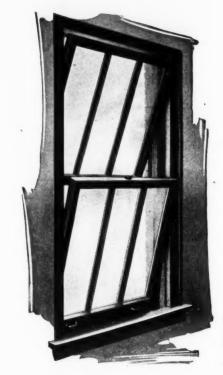
Bedford School, Bedford, Pa.



New Rochelle High School, New Rochelle, N. Y.



Junior High School, New Philadelphia, Ohio

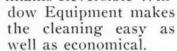


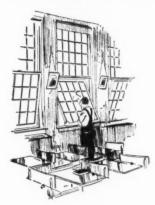
Williams Plank Frame Type Window for School Buildings

WINDOWS EASILY CLEANED

- even in wintry weather

The dull days of winter add to the difficulty of getting sun light into schoolrooms. What little sun light there is, is often partly shut out by dirt deposited on the glass by snow, rain, and sleet. Frequent cleaning prevents this condition—and Williams Reversible Win-





Both upper and lower sash are completely reversible, so that both sides of the glass may be cleaned from inside the room while the window remains closed. No outside cleaning is necessary.

Ideal Draftless Ventilation

In addition to economical cleaning, Williams Reversible Window Equipment provides ideal draftless ventilation. On cold and stormy days either upper or lower sash may be tilted to any desired angle, deflecting incoming air upward.

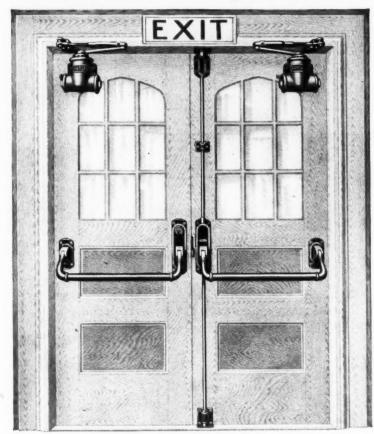
Hundreds of schools are equipped with Williams fixtures and many cities make it a policy to install Williams Equipment in every new school building.

The Williams Pivot Sash Co.

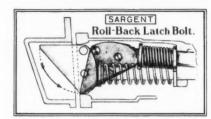
East 37th Street at Perkins Avenue CLEVELAND, OHIO.

WILLIAMS REVERSIBLE

A new fire-exit latch bolt that can't be jammed



Not even the pressure of a panic-driven crowd can make the Sargent roll-back latch stick



School officials, who are responsible for the protection of the lives of the pupils and are anxious to make proper provision for quick exit in case of fire or panic will be interested in this new development which has become the standard Roll-Back action for

SARGENT

Fire Exit Door Bolts.

The improved action is shown by the detailed drawing. The Cross Bar does not withdraw the bolts, but releases the deadlocking mechanism, allowing the bolts to be rolled back into the case of the lock as the doors are pushed open.

Security.

The Latches provide complete security and prevent entrance from the outside of the building when the school is not in session, while they can be arranged to permit entrance during school hours if desired.

Quick Exit At All Times.

is provided and in case of necessity the doors can be instantly opened by slight pressure on the handle Bars at any point.

Door Closers

close the doors, during their day by day use, quickly and quietly, the application shown in the illustration with the Sargent special foot (No. 35) being particularly desirable.

Pamphlet illustrating and describing Fire Exit Door Bolts will be mailed upon request.

Sargent Fire Exit Door Bolts, Locks and Hardware are sold by representative dealers in all cities.

SARGENT & COMPANY

Manufacturers
NEW HAVEN, CONN.

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The Philadelphia Warehouse of the Atlantic & Pacific Tea Company heated by Heggie-Simplex equipment

Choice of Careful Corporations—

WHERE heating must be even, sure and economical—in the office buildings, warehouses and plants of leading corporations all over the country—you find Heggie-Simplex electric-welded steel heating boilers in steadily increasing numbers. The most modern of heating equipment—making certain the most satisfactory service at the lowest final cost.

Heggie-Simplex Boiler Co., Joliet, Illinois. Representatives in principal cities — telephone and address listed under "Heggie-Simplex Boiler Company."

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ELECTRIC-WELDED STEEL HEATING BOILERS



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It is free and given willingly

OW that vacation time is near, you are considering what attention yourschool building needs. Let Sonneborn help you!

For many years Sonneborn engineers have studied how to preserve school buildings; what materials to use; how to apply them as economically as possible. We save your time, save money and assure satisfactory results. When you deal with Sonneborn you deal with experts of long experience in school building upkeep.

A Sonneborn representative will call in response to the coupon below. He will not be concerned about the size of your repairs, for we are as much interested in small jobs as in large ones. If you decide to use our products, we will welcome your order, but you will be under no obligation.

Send the coupon and have a representative call who understands school upkeep. He will give you sound counsel on the sensible economical thing to do.

SOME SONNEBORN PRODUCTS that renew your building on a lasting basis

LAP DOLITH concrete floor hardener will make your concrete floors permanently white after other paints turn yellow. Can wearproof and dustproof. No more unhealthy dust. No more depreciation.

LIGNOPHOL preservative floor dressing SONOTINT is a special, flat, washable will keep your wood floors from splintering, rotting or drying out. This treatment lasts for years.

SONOTINT is a special, flat, washable wall finish for classrooms. Easy on eyes. Has no lustre. No poisonous ingredients. Dirt wipes off without marring finish.

Mail coupon for representative to call

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114 Fifth Avenue	New York
L. SONNEBORN SONS, INC., 114 Fifth Ave., New York	
Without incurring any obligation, I would like to talk with your representative about school building renovation.	
Name	
Address	





St. Joseph's Orphan Asylum Peekskill, N. Y.

- Wherever children congregate schools, institutions, homes, the toilet and shower compartments must be kept not merely clean but sanitary.
- That is why SANYMETAL Toilet and Shower Partitions are being installed in places where the health and happiness of American childhood is the first consideration.
- Staunch, sturdy, practically indestructible, SANYMETAL Partitions are sanitary and easily kept that way, besides being decidedly attractive and money-saving.

(Unit sections for any space)

Sanymetal Products for Schools are: Toilet, shower, dressing and urinal compartments. Corridor and smoke screens. Metal doors and wainscot. Sanymetal Gravity Hinges. Write for New Catalog No. 15.

The Sanymetal Products Co.

Cleveland, Ohio 1703 Urbana Road





STANDARD FOR A QUARTER OF A CENTURY

A Laboratory Specializing on School Cleanliness

The Midland Laboratories make a specialty of products for the promotion of health and cleanliness in the schoolroom. Products for cleaning walls and floors, products for laying germ-laden dust, special floor dressings and antiseptic compounds which are particularly suited for school use, all form a specialized branch of the Midland industries. Those who are charged with the welfare and the health of children will do well to standardize on Midland products.

Midland Liquid Waxoleum

Wood floors or composition floors, seats and desks, usually so hard to keep in presentable appearance—can be easily and economically maintained with Midland Liquid Waxoleum. It does not leave an oily or sticky finish. Remarkable cleansing qualities combined with a quick brilliant polish.

Midland Mint Aldehyde

This healthful spray destroys unpleasant odors and leaves the air fragrant and clean. Midland Mint-Aldehyde has powerful deodorizing properties; it creates an atmosphere that is enjoyable, healthful, and lasting.

Midland French Floor Dressing

A superior product for the finishing of floors that have just had a hard scrubbing. Midland French Floor Dressing penetrates deeply into the pores of wood exposed and forms a solid coating of protection. Apply Midland French Floor Dressing for best results.

Midland Blackboard Cleaner

Sales representatives are located in all principal cities. An inquiry to the home office will put you in immediate touch with the one nearest you, or order direct from, Your blackboards are easily kept BLACK with this cleaner. It absolutely removes all the scum or haze that is usually apparent on blackboards. A neutral product that is harmless to composition boards.

MIDLAND CHEMICAL LABORATORIES, Inc. DUBUQUE, IOWA, U. S. A.



the children have good light and air in the classrooms ~ ~

Those who have the good fortune to get needed funds for a new school building have also the responsibility. of studying the future and planning that new building so well that it will be adequate for years to come.

One important consideration is the provision of good natural lighting and ventilation, so vital to the welfare of the pupils.

Here is where recourse to a specialist in school daylighting and ventilating is advisable. The logical step is to consult Lupton. For many years, Lupton has made several types of steel windows for schools and has co-operated with school designers in making applica-

tion of these windows to suit

individual requirements. Lupton Steel Windows, correctly placed, fill the classrooms with daylight and afford an economical and wholesome means of regulating air temperature and condition. And the high investment value of Lupton Windows has been uniformly borne out by their enduring service and their architectural conformity to accepted school design.

Lupton engineers, well versed in the window needs of schools, are at your service, free of obligation. Call on them before you build.

DAVID LUPTON'S SONS CO., 2205-d E. Allegheny Ave., Philadelphia Branches in Principal Cities

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BERL

STEEL LOCKERS

PLAN NOW for Second Semester Requirements

Is your school one of the many that will require more locker equipment for second semester enrollment?

You will find a quick, efficient solution to your problem in one of the many Berloy types and sizes that have been standardized for school use. Our nearest representative will help you plan for a speedy, practical locker installation during the December vacation period. Call him at our expense.

THE BERGER MFG. CO., Canton, Ohio

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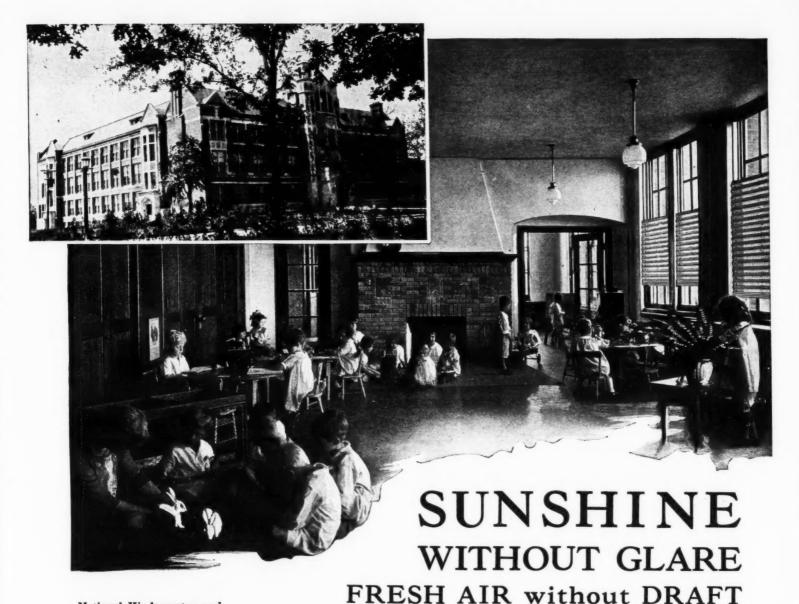
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TYPE S.S. - SINGLE TIER, STANDARD LOUVRE





National Kindergarten and Elementary College Evanston, Ill.

Upon completion of this handsome modern school building, an order was placed for ATHEY SHADES for their East front only; very soon after, however, an order was placed for a complete installation.

Other ATHEY Products

Skylight Shades, Sunbursts for Circlehead, Segmental or Gothic windows.

ATHEY Cloth Lined Metal Weatherstrips.

Athey Weatherstrips are also used in hundreds of schools where they have changed drafty, under-heated buildings into schools that heat easily and the ventilation of which can be controlled, besides, of course, the enormous saving in fuel.



PERENNIAL WINDOW SHADES

ATHEY SHADES are ideal for the Schoolroom. They have demonstrated their effectiveness in hundreds of the finest schools in every State in the Union.

Conservation of eyesight is one of the most important reasons for the demand for ATHEY SHADES in the school building.

Details of specifications, as outlined by the Bureau of Education, are met in practically every item by the operation and material of the ATHEY SHADE.

ATHEY WINDOW SHADES are instantly adjustable to shade any part of the window. The shade material is a special grade of coutil, herringbone weave, 200 threads to the square inch, mercerized and calendered to a smooth finish. Resists dirt. Tight guide wires prevent flapping. No latches, catches, or springs to slip, stick or break. In any length and in widths up to 16 feet. Sunbursts for Circle-head, Segmental or Gothic windows. Also operating shades for skylights.

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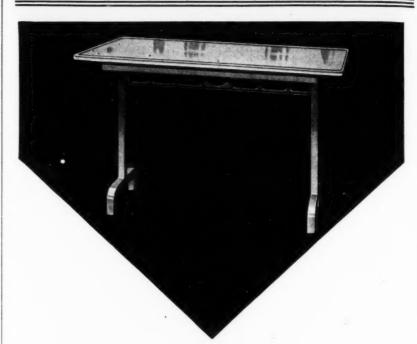
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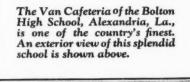


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Derby correct posture chairs are manufactured under the Thompson correct seating patents. The construction employed is, in the opinion of leading orthopedic surgeons, exactly designed to secure correct posture to the sitter. With reason Derby believes his are the finest correct posture chairs available.

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The "Viking" is built of 20 gauge steel throughout, and reinforced at all the vital points to make it last longer than the school building itself. Being made entirely of steel it is fireproof and cannot be bent or sprung out of shape. Consequently you will have no sagging seats, creaky backs, or wobbly joints to disturb the students or detract from the appearance of the rooms.

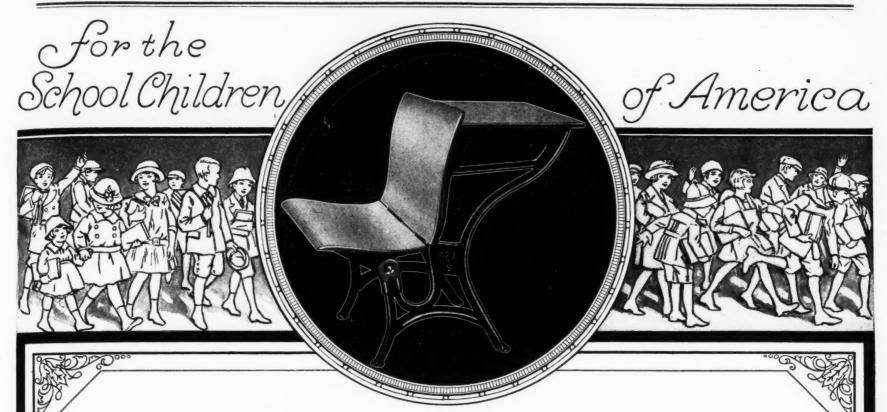
And when it comes to comfort and beauty, the "Viking" stands in a class by itself. The inclined back insures that marked degree of comfort which characterizes the "Viking" and which was heretofore unknown in folding chairs. And in our endeavor to give you even more in comfort we have designed the fibre seat and the full upholstered seat.

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HALF century of specialization has built into A "American" seats two features most important to all school officials... physical protection to safeguard the health of the nation's children and tested quality.

Years of tireless effort and research have developed the hygienically perfect "American" seat. Correct posture for the growing child is made easy, comfortable and restful. Yet strength and durability are not

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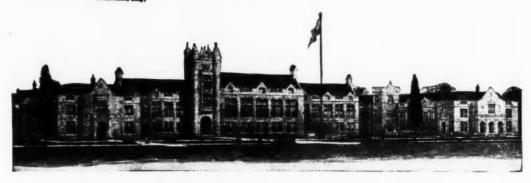
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The Factory is in Michigan, but the SERVICE is LOCAL to you



If these desks cost a little more in the beginning, that is only because they have been built to cost far less in the end

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Fordson School, Fordson, Mich. H. J. Keough, Architect.



'INO' Desks for Teachers

Lino Tables

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Cafeterias-Libraries All Departments

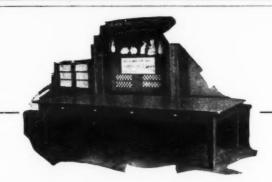
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For the Second Half of the School Year Prevent Epidemics in First and Second Grades

PRESENT day schoolrooms are veritable traps for the collection of dust, dirt, and their inherent germs. Every stationary screwed-to-the-floor desk is a breeder of germs—a promoter of epidemics. Each desk has countless cracks and crevices in which dirt lodges permanently. The only way to get such a room perfectly sanitary is to unscrew the desks and seats from the floor. This, of course, is impractical.

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MANUAL TRAINING BENCH No. 280



will show that the combination of various sized drawers and cupboard makes an unusually practical bench. Notice, especially, the small drawer which is intended to hold nails, screws, small tools, etc., which so easily become misplaced when kept with the larger tools. Being able to immediately lay hands on these small but necessary items, will be the means of saving a great deal of time, thereby promoting efficiency. Also, notice the large cupboard, which will hold such tools and materials which can not be kept in the general or three private drawers. Bench is equipped with our Abernathy Rapid Acting Roller Nut Vise No. 70D on front, adjustable stop and dog.

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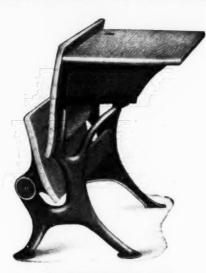
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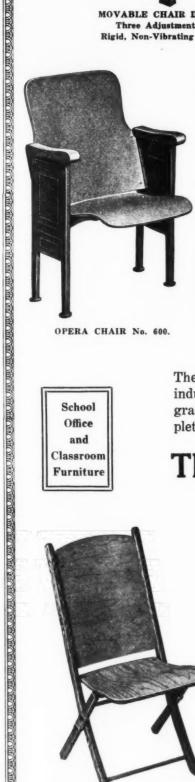
MOVABLE CHAIR DESK. Three Adjustments. Rigid, Non-Vibrating Top.



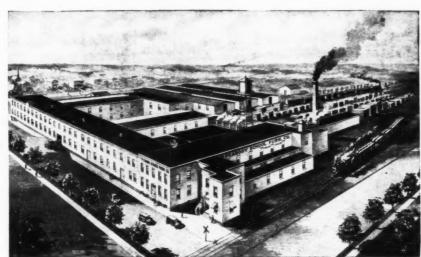
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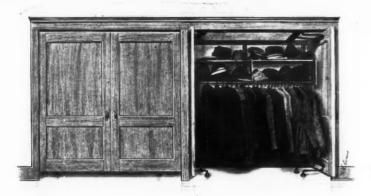
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There are vast differences in school furniture—see "Eclipse," know "Eclipse," buy "Eclipse," and be assured of the best.

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THE "ARLO" ADJUSTABLE PEDESTAL DESK

The "Arlo" Adjustable Pedestal Desk is our latest contribution to modern hygienic schoolroom seating. A beautiful desk, both in design and finish, it is absolutely sanitary exceedingly well adapted to the varying needs of any classroom and guaranteed to withstand the strenuous requirements of every type of classroom service.

The pedestal is made of semi-steel, constructed to give greatest strength at the points of greatest strain. The broad, massive base is cup shaped and when screwed to the floor will never pull loose.

The "Arlo" Adjustable Pedestal Desk will last a lifetime; has steel sides and back and the top is made from maple or birch, finished in Arlo Brown (American Walnut).

Adjustments are simple and easily made. Book box chair seat are independently adjustable. This is a distinctive feature and makes it possible to adjust "Arlo" desks to meet the individual requirements of each pupil.

The "Arlo" Line includes The Arlo Adjustable Pedestal Desk with Study Top, The Arlo Non-Adjustable Pedestal Desk, and the Arlo Pedestal Tablet Arm Chair.

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INDESTRUCTO SANI-STEEL DESKS AND CHAIRS

COLUMBIA INDESTRUCTO CHAIR DESK

Back slats adjustable; Height and tilt of top adjustable; Top leveling Device.

Large—\$4.95; Medium—\$4.80; Small—\$4.65.

Dovetailed hardwood drawer A \$1.50; Book Drawer with steel sides and bottom B \$1.15; Swinging flush top ink well 15c.

The 24 good points of a school desk as established by a committee of leading educators are incorporated in this desk. They are listed here.

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- Seat of proper height.
- All corners rounded. Seat saddled to fit body.
- Seat of proper width.
 Seat tilted higher at front.
- Back tipped backward slightly. Back curved to fit body.
- Back adjustable in height.
- Back of solid quartered oak.
- Seat extends slightly under top. Desk height adjustable to child. Desk slant adjustable.

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- 11 and 12 constitute a Tilting Top.
- Curved front feet give same strength and effect as separate support. Desks easily moved for sweeping. Noiseless, no hinges or swivels. Arm rest extended backward. Simplicity—Examine illustration. Durability—Indestructible steel. Finish, dull, lasting quality. Flush top inkwell, noiseless, removable.

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 11. Box or sliding drawer.

 May be used on either side.

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 23. Pencil groove on top.

 24. Top leveling device.



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Here is a modern desk for the modern school. This desk can be had with two drawers at \$13.00; with four drawers at \$17.00; with five drawers at \$19.50. It has a steel frame and body that is finished dark olive green. The top and drawers of fine-ply built up quartered oak, finished dark golden. Made in two sizes.



The illustration below shows the small tablet arm chair, especially adapted for use in elementary schools. The design and construction of this



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COLUMBIA INDESTRUCTIBLE KINDERGARTEN CHAIR

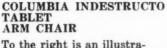
Here is our Indestructible Kindergarten chair. It is sturdily constructed with a saddled oak seat and curved quartered oak back and a solid steel frame. Made in three sizes. One doz-

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TEACHERS' CHAIR

This chair can be used for Teachers, Visitors, or the Library. It is good looking and dignified. Oak seat and quartered oak back are finished dark golden or brown. Has Priced at \$2.85 each.



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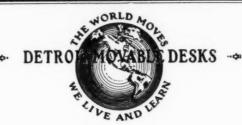


LIGHT WEIGHT TABLET ARM CHAIR

The illustration to the left shows our tablet arm chair of slightly lighter construction, but amply strong. Price of each \$3.75.

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Has exclusive, individual features which make it superior:

Brush revolving at moderate speed, acts as a beater, dislodging crayon dust and cleans more thoroughly than stationary brush—yet, does not wear and tear eraser like rapidly rotating brush attached directly to motor shaft.

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OPERATES FROM ANY LIGHT SOCKET-DEPENDABLE — GUARANTEED OF GENUINE UTILITY — NOT A TOY

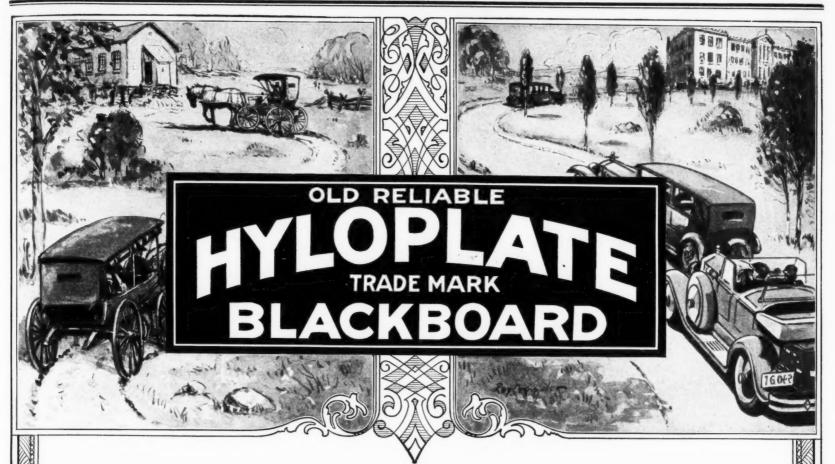
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It has the universal adjustment, that is, vertical and horizontal in ONE operation. It is adjusted merely by loosening the set bolt, when the desk may be raised or lowered to the desired height. There is no "play" in the joint when locked.

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We manufacture desks of many designs. Send for our complete Catalog.

The National School Equipment Co.

Manufacturers of Complete School Equipment Port Washington, Wis.

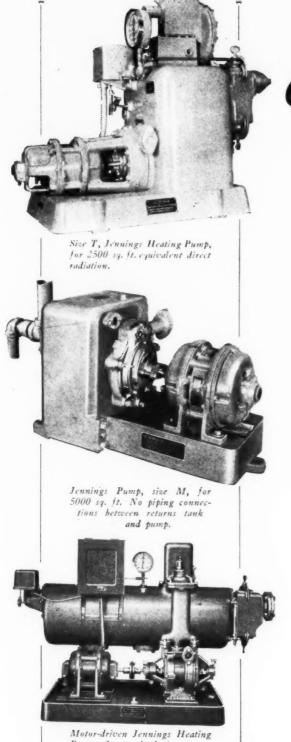
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This is a wonderful improvement. Available working space is more than doubled; arm is supported while writing, resulting in better penmanship with less fatigue and nervous strain; correct posture insures greater comfort and less eye strain; full support for back while writing.

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Pump. In standard sizes up to

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December, 1927

No. 6

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A Word With Our Patrons

The period of the year when we are inclined to become retrospective has been reached, and at the same time the period when contemplation of the future is in order. In brief, the holiday spirit is on us.

If we take an inventory of the year, its accomplishments in the field of popular education as applied to this broad land, there is much to render us thoughtful, much to prompt us to readjustments, much to put us in a cheery mood. The great army of American workers engaged in a conflict against ignorance and darkness has rendered valiant service.

It leads us to the comforting belief that more efficiency, more intense effort, more real service has gone into the field of popular education than any one previous year. Never were the school forces better manned or equipped to train a rising generation for the duties of citizenship than they are at this moment.

Are readjustments in order? Is there room for improvements? Can the schools continue to expand, to grow, to thrive? The answer is decidedly in the desire for that progress that keeps us keyed up, deaffirmative. There is room for progress, and it is the termined to do better next year.

Thus, while the holiday spirit may be accentuated by the consciousness of a year's work well performed, it may also be fired with an ambition to do better during the coming year. In this spirit let us extend to the school public of America, a MERRY CHRISTMAS and a HAPPY NEW YEAR.

May the season be blessed with the satisfaction of a task well performed, and the optimism which springs from the confidence that the future will see even greater things.

THE EDITOR.

Title Page and Index

Readers will find in the back of this issue of the JOURNAL the annual Title Page and Index for the year 1927. This is provided especially for libraries, schools, and individuals who desire to bind the files for permanent reference.

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REPEAT ORDERS INDICATE SATISFACTION

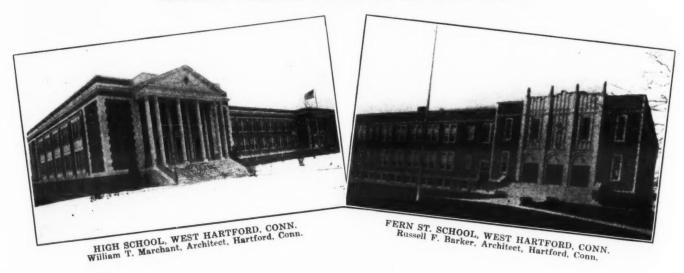


For many years the Town of West Hartford, Connecticut, has carried on a carefully planned building program to house its rapidly increasing school population. The best of equipment has been chosen for its buildings, which rank second to none in the State.

It is significant that "Standard Electric Time" equipment has been chosen to furnish the time service in all these buildings, a total of seven.

The Better Service secured with uniformity of equipment is in itself a decided advantage.

"REPEAT ORDERS INDICATE SATISFACTION"



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"MAKES EVERY MINUTE COUNT"

THE AMERICAN SCHOOL BOURD JOURNAL

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The Menace of Rubber-Stamp School-Board Majorities.

The Value of Standard Tests

Two Cases

Don C. Rogers, Principal, Smyth School, Chicago, Ill.

Name: Limn S

The purpose of this article is to show how standard tests may be valuable professional tools in the hands of the teacher or principal, whether in a little rural town of three hundred or in a metropolis of three million. The two case studies reported here are not fiction; they are true accounts of two real boys.

I Linn S—

I was "superintendent" of schools in a little
Iowa town of 300, located ten miles from a railroad. Linn S—— was one of my pupils, a
16-year-old high-school boy who could play the
violin well enough to be in demand at church
and school programs, although he had not had
music lessons. Linn used to visit me at my
room quite often, mainly to listen to my portable Victrola. He even tried to compose incidental music to accompany some of the poem
records.

Consonance

Motor Ability
Sonse of Time
Regulated Rhyth
Reaction Time
Sonse of Intens
Singing Key
Singing Interval
Voice Control

Linn's father owned the local hardware store. Mr. S——— was of German extraction, practical, and well-to-do. He was proud of his son's violin playing but somewhat annoyed because Linn constantly pleaded for a musical career. Furthermore, Linn was reluctant to do heavy work in the store through dread of toughening his fingers.

Linn told his troubles to me—his teacher and friend. He yearned for a musical career. My roommate (a college mate who was now editor of the weekly paper) and I visited Mr. Sat his store. We told him that Linn was disconsolate. Next we told him about the Seashore Tests of Musical Ability, invented by Dr. Carl E. Seashore, head of the psychology department at the University of Iowa. We had taken these tests as psychology students at the university. The tests were reputed to diagnose several strands of one's musical make-up and a profile graph of the person tested would reveal whether the time and expense of a musical education would be warranted. Neither my roommate nor I knew very much about music, but knowing Linn in and out of classroom and also knowing the Seashore tests, we felt safe in suggesting a sort of sporting proposition to Mr. S

A month later I introduced Linn to Dr. Seashore, and for the next three days he was tested in the psychological laboratories. At the end of that time, an oral report was given to me. Dr. Seashore is a grim-visaged, dispassionate scientist, but he could scarcely control his enthusiasm as he related the splendid test results achieved by the boy. He predicted a fine musical future for Linn. This summer I visited Dr. Seashore and secured from him a copy of that report, the profile graph of which is shown in Figure 1.

Linn returned home alone. I never went back to the little town, but Dr. Seashore and I wrote to Mr. S——.

Several years passed. Finally, items about a "young Kreisler of Southwest Iowa" began to appear in the Iowa newspapers. Next came a rather full account of the boy's career in the Des Moines Sunday Register. They proved that Mr. S—— had kept his part of the bargain. He had sent Linn to Omaha and had turned him over to the best violin teacher available for a thorough musical education.

Apparently Linn is making good. After leaving Omaha he began to give concerts. He toured

Gense of Pitch

Tonal Imagery

Tonal Memory

Consonance

Motor Ability

Sense of Time

Pree Rhythm

Regulated Rhythm

Reaction Time

MUSICAL PROFILE

May 31, 1917

Pree Rhythm

Regulated Rhythm

Reaction Time

Acuity of Hearing

Sense of Intensity

Singing Key

Singing Interval

Voice Control

Register of Voice

Quality of Voice

Training

Musical
Appreciation

The numbers in the chart indicate the score in "percentile rank" on each of the factors mentioned; that is, we rank all the me-called normal persons from the best to the poorest, calling the best 100 per cent and the poorest 1 per cent. The average would be 50 per cent. The norm is 50 per cent.

CHART I. MUSICAL PROFILE OF A TALENTED BOY.

the Atlantic seaboard, giving violin recitals. I chanced to meet him only once since the old days—in the building of the Chicago Musical College where I had a hurried talk while waiting for an elevator. Linn is now engaged in chautauqua and lyceum work, giving violin recitals. He has married a young musician. Music is his life's work. He has the soulful, dreamy eyes of a truly inspired artist. Undoubtedly he will be heard from in a larger way.

Standard tests may be diagnostic and prognostic. The Seashore Tests of Musical Ability were both. They picked a boy from an isolated rural community. They diagnosed his musical powers and found no weaknesses. They predicted a worthy musical future. The prediction is already true. Standard achievement tests are professional tools in the hands of teachers, and they may be used to tap undiscovered wells of talent and genius.

II. Louis S-

Louis is a Jewish boy, the fifth in a family of seven children. He lives over a plumbing shop on Blue Island Avenue, Chicago. This area is known as "the valley"—on Chicago's near-west side. It is within three blocks of the notorious



LOUIS S——, WHO IS BEING HELPED THROUGH MENTAL AND EDUCATIONAL TESTS.

Maxwell street "ghetto" market and is only two blocks from the well-known Maxwell street police station. The district is populated primarily with colored, Jewish, Italian, and Mexican people. If there are any underprivileged children in Chicago, they are in this region. Louis attends the Smyth school, located between 13th and Maxwell Streets.

In a general way, the Smyth school teachers knew that Louis was a bright pupil, but it was only after mental tests and a battery of achievement tests had been given in the school, that this extraordinary case was "discovered." Following are some data regarding him, classified in accordance with the five ages of childhood: (May, 1926).

1. Chronological Age. Louis is 11 years and 2 months old chronologically.

2. Mental Age. Louis is 15 years and 9 months old mentally. The Otis and National intelligence tests have been given throughout the Smyth school, grades 3 to 8, inclusive. The median intelligence quotient for the 560 pupils tested was 88. Louis has an IQ of 138—the

highest in the school.

3. Educational Age. Louis is 15 years and 9 months old educationally. A battery of nine standardized tests (the Stanford Achievement Tests) was given him. These tests cover the subjects of arithmetic, reading, language usage, nature study, literature, history, science, and spelling. Although Louis was in the 6B grade, he achieved a grade level beyond the tenth grade in high school. A conference with the principal elicited the strange fact that outside of school, the only books read by Louis are the Merriwell

4. Social Age. Louis is about 11 years old socially. Only subjective data are available as to his social age. However, he plays with little boys and girls approximately his equal chronologically, he is not a "mixer," and he displays no especial leadership qualities. He does have a poise and an assurance in the presence of his teachers, but it may be the confidence growing out of a sure-footed knowledge of his school lessons

series and Nick Carter stories.

5. Physical Age. Louis is about 9 years old physically. The doctors at the Michael Reese Dispensary who gave him a physical examination, reported him 8 per cent under weight for his height. However, he is 23 per cent under weight as compared with the average boy of his chronological age. According to the Baldwin-Wood national height-weight tables, the average 11-year old boy weighs 77 pounds and is 56 inches tall; Louis weighs 61 pounds and is 52½ inches tall. Louis is thin-featured and wizened. His brow is furrowed.

In a conference with his principal he was asked about his diet. In the following order he first mentioned the foods which he eats: (1) pickles, (2) bananas, (3) bologna. Louis was unable to sleep well for quite a period. He claimed a mosquito got into his ear and he could not get it out. It seemed to buzz at night, keeping him awake. He has got over that now.

Frances J. Perkins, psychologist from the child-study department of the Chicago schools, was asked to examine Louis. She inspected his teeth and found a deplorable condition. The boy has no masticating surfaces on his lower jaw. One upper canine is missing. He still has two deciduous (baby or milk) teeth. He has a total of only 16 teeth. There are but five 6-year molars on his lower jaw, whereas the average 6-year old child has already attained four.

Figure 2 shows the age profile of this boy. Ordinarily one would want to see a straight line curve, approximating the broken line norm for an average boy. But here is an extraordinarily uneven line. The problem resolves itself into an attempt by the schoolmaster to equalize these ages upward so far as possible. Nothing can be

(Continued on Page 135)

The Classification of Elementary-School Pupils on a Nongraded Basis¹

Henry J. Otto, Superintendent of Schools, Buffalo Lake, Minn.

A small school in a country town must carry out its policies and teaching procedures under certain limitations with which larger city systems generally do not have to contend. These limitations are:

The pupils in each room, on the whole, are made up of at least two grade groups. To divide each grade into A and B groups in order to have semiannual promotions is not feasible. Likewise, from the standpoint of the teacher's time and program, it is not convenient to divide each grade into two or three ability groups (sometimes called X-Y-Z groups) with a differentiated curriculum for each section.

Each grade or age group is limited to about 15 or 18 pupils, and the division of each grade into two or three ability groups would make it necessary to have many teachers, or to have each teacher care for many groups.

The small-town school of necessity presents for the teacher a "training in service" opportunity, giving the raw recruits their first two or three years of experience before they move on into larger systems where positions, salaries, and social environmnts are more attractive. Consequently, teaching skill resulting from supervised experience is at a minimum, teacher-turnover is large and quite regular, and the superintendent always begins the new year with a number of inexperienced teachers whom he must train.

The superintendent teaches from one to four high-school classes and his time for supervision is very limited. Each grade teacher usually manages her own room according to her own ideas and independent of the rest of the school.

The school management, program, and policies are not consistently formulated or followed. This is partially due to the brief tenure of superintendents and the inadequacy of records. The fact that the superintendent and faculty change frequently gives greater importance to the records. The records should show the exact educational status of each child, and what teaching methods have preceded. This gives the new superintendent a basis on which to work out his program.

Effects Upon the School of Traditional Organization

The inter-working of many of the above mentioned handicaps has caused the small-town school to be more subject to old-fashioned methods and traditional routine organizations than the larger systems. The grading and promotion of pupils is usually unscientific and based merely on the teacher's judgment. Pupils are often unduly promoted beyond their ability to comprehend the subject matter, or are retarded to the extent that their schoolwork offers no challenge to their abilities. Standardization of administrative organization and procedure is desirable, but the same standard organization is not permanently adaptable to all situations. The tendency is for schoolmen to accept the existing organization as permanent and as the most suitable. The urgent challenge of the hour confronting any school system is that it be organized in such a way as to give each individual pupil the best education which the existing conditions will permit. In order to accomplish this, many school systems have found it necessary to break away from the traditional practices. Various devices have been applied to meet the above challenge, and each one has been more or less practicable in its local situation.2

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'Otto, Henry J. The Organization and Administration of a Program for Instruction in the Public Schools at Buffalo Lake, Minn. Unpublished masters' thesis, 1927, University of Minnesota Library, Minneapolis. 2"Classification of Pupils According to Abinty," Elementary School Journal, March, 1927, Page 488. Classification of Pupils an Administrative Problem

The average superintendent of schools has neither the time nor the training to be a pioneer in discovering new scientific facts about education. It is, however, the duty of every school executive to organize and administer the school in such a way that the program of instruction may be effective. He needs the help of the existing facts and materials in the field. This is all the more necessary if the program calls for a critical analysis of pupil difficulties, and the classification of pupils on the basis of such diagnosis. The problem of diagnostic testing and scientific classification of pupils is one of supervision as well as of administration. The general working machinery of the school must provide for testing, for diagnosing the individual needs of the children, and for following such diagnostic testing with a teaching program conforming to good scientific educational procedure. The supervisor must provide for these activities in the program.

Disregarding Grade Classification in a Small School System

The public schools at Buffalo Lake, Minnesota, have been subject to all the conditions outlined above as usually found in small-town schools. During the 1926-27 school year, the organization of the elementary grades at Buffalo Lake was somewhat changed in an endeavor to improve the teaching situation in the schools under the existing conditions; that is, with the present teachers, equipment, buildings, and available funds. The customary grade classification was disregarded in the plan followed, and the pupils of grades 3 to 8, inclusive, were placed in groups in reading, arithmetic, language, and spelling, according to the degree of achievement that they, as individuals, had made in any of these subjects. The procedure as outlined hereafter placed each child in a class or grade group in each of the four mentioned subjects in accordance with his achievement in that subject, regardless of his achievement or progress in other studies. This was done by a careful diagnosis of each pupil's needs and the extent of his subject progress, and then by placing him in a grade group where the teaching would develop his particular needs. Thus, a certain child might be found in the sixth-grade arithmetic class, in the fourth-grade spelling class, and in the fifth grade in all other subjects. Group teaching was continued.

The change in administrative procedure had to be carried out without disrupting the general progress of the school, and without arousing unfavorable comment from parents, teachers, and others concerned. Subject classification and promotion are almost universal in high school, and in a recent report³ four elementary schools are mentioned as using that plan.

The Arrangement of the Program

The classification of pupils by subjects made it necessary that the program of classes be such that any child would be free to change from grade to grade, or from room to room, according to the way in which his achievement placed him. This was made possible by having the same sub-

ject taught in all six grades at the same hour. The morning schedule followed at Buffalo Lake is as follows:

9:00- 9:40 Arithmetic 9:40-10:15 Language and Grammar 10:15-10:30 Penmanship 10:30-10:50 Physical Education 10:50-11:30 Reading 11:30-12:00 Spelling and Study Period

All the pupils of these six grades had arithmetic at the same time. This period was divided into two parts. During the first half of the period, one grade of a room had recitation, while the other grade of the same room had an arithmetic-study period. The other subjects were arranged similarly, except penmanship and physical education, in which the two grades of each room were taken as one group. For the afternoon program, which involved the remaining subjects, each child was placed in that grade group which most nearly corresponded to the majority of his grade classifications of the forenoon. The technic used in classifying pupils in reading, arithmetic, language, and spelling will be given in subsequent sections.

Standards for Differentiating Groups

In order that it may be true that one pupil belongs in one group in reading or spelling, and that another pupil belongs in another group, there must be some criterion on the basis of which differentiations are made. The norms of standard tests (wherever available) were used as convenient points of demarcation. The pupils who composed a fourth-grade class in reading were those whose test scores in reading centered around the norms for grade four; the pupils of a fifth-grade class in arithmetic were those whose test scores in arithmetic centered around the norms for grade five, etc. It was, therefore, convenient to use the terms "reading grade four," or "spelling grade six" in designating various groups. Existing knowledge concerning pupil abilities, and standard and diagnostic tests, were used in all classifications.

Classification in Reading in Grade Three

Especially important in grade three is the score on the oral-reading test. A child should master in grade three the mechanics of oral reading because very little of such mechanics will be taught after the third grade. Some pupils have defective sight or speech and never become good oral readers. In such cases proper allowance should be made after careful study of the individual case. A child who comes up to the standard in oral reading and very near the standard for grade three in other reading tests may be promoted. Some provision should be made for those pupils whose I.Q.'s are quite low. In grade three the I.Q. should not play a large part when making classifications, since probably no pupil, regardless of his I.Q., will get very far in later reading if he has not mastered the inechanics of reading. Table I represents a sample of the facts on the basis of which reclassifications were made in grade three in June, 1927, the end of the school year. Ione K. (Table I) is of normal mental age for her grade. She scored low on the silent-reading tests, but was above the fourth-grade standard in the oralreading test. She started in the fourth-grade group in Sept., 1927. Floyd is mentally under-

³Jensen, D. W. "The Gifted Child," Journal of Educational Research, February, 1927, Page 128.

TABLE I. A Class	ification	Sheet in	Readin	g—Grade	Three, E		ake, Minn., June 3, 19	27
Name	M.A.	I.Q.	M 8	T	Seconds	Errors	Characteristics	Next Year
Vivian M		89	8	42	57	0	superior	grade 4
one K.		84	4	38 33	62	1	poor comprehension	grade 4
Floyd W		96	5	33	112	3	poor sight	grade 3
Virginia W		69	5	40	73	3	slow	grade 4
Standard: Grade 3	8-0		4	37.3	63	3		
Grade 4	9-0		7.7	42	62	2		
M.A.—Ment	al Age.	Haggerty	Intelli	gence Tes	st, Delta	2.		
I.Q.—Intel	ligence (Quotient	(as of	Sept. 1, 1	926).			
M—Com T—T-Se	rehensione on T	n score	on Mor -McCall	roe Silen Reading	t-Readin Scale.			
Oral—Time	in seco	nds and	number	of errors	, Gray C)ra1-Rea	ding Paragraphs.	

age for his grade. He scored below the thirdgrade standard on the Thorndike and the Gray oral-reading tests. He is retained in grade three until he can show a better record. ginia is below the third-grade norm in the rate of oral reading. Her I.Q. is 69. She was promoted to the fourth-grade group for the opening of school in Sept., 1927.

Reading Classifications in Other Grades

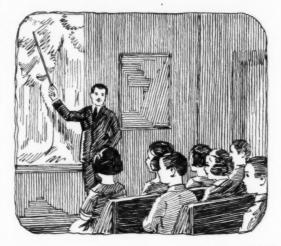
Comprehension scores on all standard reading tests may well exceed the standard median for the grade in which the child is enrolled; that is, a child who is being recommended for classification in the seventh grade should well exceed all the standard medians for grade six. Where the scores of standard tests are available, and a pupil scores far above the norm for his grade in one or more of the tests, and falls far below the norm in the third one, an average may be struck and the child classified according to that average.

The mental age of the promoted child should equal the normal mental age of the entering pupils in the grade for which he is recommended; that is, a child recommended for a seventh-grade class in reading should have a mental age in September equal to twelve or twelve and one-half years.

The social maturity of the child should be such that he fits into the group in which he is to be placed. Social maturity means "the extent and scope of previous training and experience, extent of vocabulary, facility with which he uses ideas, oral English, general range of experience, and the degree to which he can rely upon himself to get assignments and collect material." In other words, how mature is the child? Although no grade norms or definite lines of demarcation can be established, teachers who have worked with pupils of the same age as those found in their present classes have a general idea how matured a child should be to fit into the next higher grade. There are pupils who score high on standard tests, yet they are so immature in their ways and ideas that they would get very little out of the reading in the next higher grade. They cannot understand the material as it should be understood and interpreted.

The same amount and quality of work cannot be expected of all pupils with widely differing general mental ability. When making classifications, some consideration should be given to pupils of low mental ability.

Table II is illustrative of the way in which pupils were reclassified (or promoted) in reading in grades four to eight, inclusive, in June, 1927. Lenora (Table II) is under-age for grade five and is only of average social maturity for a fifth-grade group. Her I.Q. is 85. Most of her



organization of the school so that the teaching may be effective is an administrative problem.

In September, 1926, two spelling tests were given to pupils of grades three to eight, inclusive, at Buffalo Lake. The first of these tests consisted for each grade of 25 words, selected at random from that column on the Ayres spelling scale for which the accuracy standard for that particular grade is 84 per cent; for example, grade three was given 25 words from column J, grade four from column M, etc. The second test was a scale test composed of fifty words, two words being chosen from each of columns A to Y on the Ayres spelling scale. Lippincott's New Horn-Ashbaugh speller and method of teaching were used, and a record was kept of the number of words misspelled by each student on Monday, Wednesday, and Friday of each week. Thus, a triple check was had on each pupil, how his spelling ability compared with a standard score; how his ability compared with that of other pupils in his grade, and in the school as a whole (scale test); and how well he was able to learn the spelling lessons laid out for him every week. In this way it was easy to pick the children of each grade, who scored low on the standard test and the scale test, and who were also misspelling many words on the weekly lessons. Similarly, those children who scored high on the two tests and who misspelled few words on the weekly lessons could be selected. It is possible to measure quite accurately not only a child's spelling ability, but to place him in a class or grade group in which the spelling instruction is adapted to his particular needs.

Where the pupils of a school are properly classified according to ability in spelling, it is a simple matter to keep them in groups in which instruction for each group will be adapted to the ability and needs of the individual. If objective measures are used to dif-

TABLE II. Classification Sheet in Reading-Grade Five, Buffalo Lake, Minn., June 3, 1927 Next Year Social Maturity I.Q. 122 106 M.A. 11-10 average above average 53 45 40 56 grade 6 85 110 129 11 11 18 grade 5 grade 5 grade 7 nverage below average above average (high) Standard: $9.8 \\
11.7$ Grade 5 Grade 6 M.A.-Mental age as of Sept., 1926. M.—Comprehension score on Monroe Silent-Reading Test II.
T.—T-score on Thorndike-McCall Reading Scale.

standard-test scores do not come up to or exceed She will, therefore, the fifth-grade norms. again be placed in the fifth-grade group at the opening of school in Sept., 1927. She will be promoted as soon as her qualifications warrant Vivian placing her in a sixth-grade group. (Table II) is over-age for grade five. Her test scores are above even the sixth-grade norms. Her social maturity is considerably above the average of a fifth-grade group, and she was recommended for the seventh-grade group.

Classifications of Pupils in Spelling

The teaching of spelling is an instructional problem. The classification of pupils and the

ferentiate one group from another, a pupil may be moved to the next higher group as soon as he meets the requirements of the group. In recommending that a pupil be moved from one spelling group to another higher group, his achievement scores in spelling should exceed the norms of the grade or group in which he has been enrolled. His records should show that he has mastered the work of the previous group, and that he is qualified to do the work of the next higher group.

Table III is illustrative of the way pupils in grades three to eight, inclusive, were reclassified (or promoted) in June, 1927. The recom-

TABLE III. Reclassification in Spelling-Grade Four, Buffalo Lake, Minn., June 3, 1927

			Weekly	Recommen- dation for
Name	Ayres	Scale Test	Lessons	next year
Muriel	100	80	superior	grade 6
Duane	92	66	average	grade 5
Stanley	64	48	poor	grade 4
Ruth	80	54	average	grade 5
Mabel		60	average	grade 5
Sylvan	92	64	average	grade 5
Standard:				
Grade 4	84	51		
Grade 5	92	57		

mendations for the next year designate the grade group in which the pupil was placed at the opening of school in September, 1927. Muriel (Table III) received a perfect score on the Ayres test, which is eight points above the norm for grade five. Her score on the scale test is 23 points above the norm for grade five, and her weekly work has been of superior quality. She was recommended to start in grade six at the opening of school in September. Stanley (Table III) scored below the norms for grade four and has been showing poor work on the weekly lessons. He was retained in grade four until he shows that he has mastered the words prescribed for that grade. The scores of the other pupils showed average standing at the end of the fourth-grade work, so these pupils were recommended to move into the fifth grade, thus making normal progress.

Classifications in Arithmetic

Pupils were classified in arithmetic regardless of their classification in other subjects. In making classifications in arithmetic a very careful study was made of each individual child. An intelligence test was given early in the year and each pupil's work was carefully watched during the year. Diagnostic tests4.5,6 were given at different times during the year to discover particular weaknesses, and remedial measures were applied accordingly. At the end of the school year each pupil's achievement in arithmetic, as measured by standard tests, by his general intelligence, and by his specific arithmetic ability, was studied. The teacher was thus able to tell accurately whether the pupil was a "number prodigy," was "short" in arithmetic, or was average capacity in arithmetic. Pupils of average or superior intelligence and also of normal or superior arithmetic ability were required to come up to the standards before promotions were made. For pupils of less than normal general intelligence who were also of low capacity in arithmetic, and for pupils of normal or even superior general intelligence who seemed to be "short" in arithmetic, the requirements were adjusted in accordance with individual cases.7 It would be an injustice to a child of low arithmetical ability to hold him to fourth-grade multiplication for two or three years to make him come up to a normal standard, and thus deprive him of his explorations in advanced work.

The Minnesota curriculum for elementary schools8 outlines the course of study in arithmetic in yearly units on the basis of annual promotions. This curriculum is used as a guide at Buffalo Lake. The following plan of promotion was administered under the above conditions.

Classification Procedure in Arithmetic-Grade Three

After using the Brueckner third-grade drill cards9 during the year the pupils had mastered with remarkable success the work prescribed for this grade. As a check on the speed and accuracy with which the pupils could write the fundamental combinations in the four operations

Brueckner Diagnostic Test in Whole Numbers, Edu-

⁴Brueckner Diagnostic Test in Whole Numbers, Educational Test Bureau, Minneapolis, Minnesota.

⁵Brueckner Diagnostic Test in Fractions, Educational Test Bureau, Minneapolis, Minnesota.

⁶Brueckner Diagnostic Test in Decimals, Board of Education, Minneapolis, Minnesota.

⁷Teacher's Manual, Courtis Standard Practice Exercises, World Book Co.

⁶Minnesota Curriculum for Elementary Schools, 1923. State Department of Education, St. Paul, Minnesota.

⁶Brueckner Third-Grade Drill Cards, Educational Test Bureau, Minneapolis, Minnesota.

with whole numbers, the Courtis Standard Practice Exercises Lessons 45, 46, 47, and 48 were given. The two devices gave a double check on each pupil; the drill cards showed the types of examples a child was able to do, and the Courtis lessons gave an index of his speed and accuracy.

Table IV gives a sample of the promotion procedure for grade three. Although some of the pupils were able to do the examples on the drill cards with sufficient time, they had not learned the processes automatically enough to Grade five-

Brueckner diagnostic test in fractions Buckingham scale for problems in arithmetic Courtis supervisory test B

Grade Six-

Brueckner diagnostic test in decimals Buckingham scale for problems in arithmetic Courtis supervisory test B

Classifications in Language

A good share of the language activities in school is that of happy participation in the ex-

	TA CHUS	sincation i	n Arith	metic—Grade	Three, Buf	falo Lake,	Minn., June	3, 1927	
					Courtis	Lessons			
Name	M.A.	I.Q.	A	45	46	47	48	C	D
Vivian	 8-8	89	47	90-82	60-44	90-80	60-55	average	4
Danton	 8-11	93	47	99-99	97-93	95-95	90-89	superior	4
Waiter	 10-8	107	47	100-98	99-99	90-80	90-90	superior	4
Virginia	 6- 0	69	47	95-90	60-55	89-84	60-50	poor	3
Ione	 8- 0	84	47	50-45	40-10	85-82	70-66	poor	3
	A-Numb	er of Brue	eckner t	hird-grade di	ill cards s	uccessfully	completed.	•	
	C-Speci	fic characte	ristics	of arithmotic	ability.		•		
	D-Grade	placemen	t in arit	hmetic recom	mended for	next year.			

be able to do them without hesitation. Virginia and Ione (Table IV) had covered all the drill cards of the set during the classwork but were unusually slow in developing speed. Since automatic mastery of the combinations is probably desirable for success in further work in arithmetic, these two pupils will again cover the work this fall.

Classification Procedure in Arithmetic-**Grade Four**

In the fourth grade emphasis is placed on a thorough mastery of all types of examples in addition, subtraction, multiplication, and division of whole numbers, and on the ability to perform these operations with reasonable speed and accuracy. The Brueckner diagnostic test in whole numbers and the Courtis supervisory test in arithmetic form A are good testing instruments for checking pupil progress in this work. A pupil who has from 85 to 100 per cent of the examples in the four parts of the Brueckner test correct has a comprehensive mastery of the processes. This should be accompanied by adequate speed and accuracy as determined by the group placement on the Courtis test. The Brueckner diagnostic test in whole numbers, if given in whole or in parts at intervals during the year, will reveal exactly the types of processes a pupil is able or not able to do and in that way proper teaching may be provided. If the scores in this test are expressed in per cents, comparative scores may be obtained. It is important that the student master all types of processes with whole numbers in this grade as these processes are not specifically taught in subsequent grades, and because mastery in these processes is a prerequisite for success in the work of the later grades.

Table V is just a sample of the classification technic for grade four, which contained twenty pupils. No pupil in grade four had less than 87 per cent of the examples correct in the four parts of the Brueckner diagnostic test in whole numbers. On the Courtis supervisory

perience of others. In order that this may be possible in the class group, the pupils composing the class should have similar interests. Pupils of about the same skills and mental age usually have similar interests. Thus, mental age, intelligence quotient, and the degree of subject achievement are the essential factors to be considered when classifying students in language.

Pupils recommended for transfer from one group to the next higher group may well exceed the standard medians for the grade or group in which they have been located in all three phases of language work, namely, written expression, oral expression, and correct usage of words. Moreover, their mental ages should be such that they will not be out of place in interests and social environments in the new group to which they are to be promoted. A pupil who scores low in one of the three phases of language work but scores well up into the next grade rank in the other two types may be promoted, provided other things (mental age, I.Q., and the teacher's judgment) are equal. No pupil should be promoted merely on the basis of high mental age.

TABLE VI. Classification Procedure in Language— Grade Five, Buffalo Lake, Minn., June 3, 1927

		Wilson			
		Language	Oral	Writter	1
		Error	Compo-	Compo	
Name M.A.	I.Q.	Test Score	sition	sition	P
Vivian12- 5	129	22	41.5	4	6
Esther11-10	122	21	35	5.5	6
Marsella13- 0	101	20	44	5	6
Jack11- 9	110	13	35.5	2.2	5
Norma11- 4	105	19	38.5	4	6
Phyllis13- 4	138	19	41	6.5	6
LaVera12- 2	108	15	30.5	4.5	6
Donna12- 7	127	21	34	4.5	6
Leroy10-10	108	20	35.5	3	6
Mandel 10- 0	90	10	21	1	5
Gr. median		19.5	35	4.2	
Gr. norm:					
Gr. 5		14		3.6	
Gr. 6		17		4.2	
P-Grade placement	recon	nmended fo	r the co	oming ye	ear.

Grouping in language was carried out in grades four, five, and six. Mental ages and I.Q.s were obtained from the Haggerty intelligence test delta 2 in September, 1926. A student's ability in oral composition was rated by

TABLE V. Classification in Arithmetic-Grade Four, Buffalo Lake, Minn., June 3, 1927 M.A. 9-4 I.Q. 89 D
 Name
 M.A.
 1.Q.
 B
 C
 D

 Elizabeth
 9-4
 89
 94
 2
 average

 Byron
 10-3
 111
 99
 1
 superior

 Lorraine
 10-9
 103
 90
 3
 average

 Duane
 8-9
 87
 87
 4
 poor, arithmetic is very hard for him

 B—Per cent of examples worked correctly on four parts of Brueckner Diagnostic Test in Whole Numbers.
 Converse Proposition on the Courties Supervisor Test A
 Form 1
 Form

C—Group placement on the Courtis Supervisory Test A, Form 1.
 D—Specific characteristics of arithmetic ability.
 P—Grade placement in arithmetic recommended for next year.

test a, eight pupils scored in group I, and seven in group II. Those of high I.Q. did no better than most of the others. Even those whose I.Q.s were under 90 made commendable records.

All twenty pupils were recommended for grade five for the coming year.

Classification Procedure in Arithmetic in Grades Five and Six

will not permit as detailed a description of the promotion technic for grades five and six as has been given for grades three and four. The method was quite similar, except that different tests were used. The tests used in each of these grades are as follows:

two teachers on a somewhat objective method, based on the sample compositions given in the Minnesota curriculum for elementary schools (1923). The written compositions were rated independently by two teachers using Hudleson's typical composition ability scale. The correct usage of words was measured by the Wilson language error test.

The procedure for class for these three grades. Table VI, which gives the method for grade five, is therefore typical of the way it was done in each of these grades. Most of the pupils of grade five scored above the medians for their grade. There might be



MR. ALFRED E. BARLOW, JR., President of the Board of Education, New Rochelle, N. Y.

New Rochelle, N. Y.

Alfred E. Barlow, who has been chosen president of the board of education, New Rochelle, N. Y., was appointed a member of the board in 1926.

Mr. Barlow is a graduate of Columbia University and for several years has been vice-president of The Thompson-Starrett Company, one of the largest and best known building construction concerns in New York City. As chairman of the committee on buildings of the New Rochelle board of education from the time of his appointment to his selection as president, Mr. Barlow has given a most useful service to the New Rochelle schools in the extensive building program which the city has been carrying out.

A city school system which can have the benefit of a building and engineering expert like Mr. Barlow is exceedingly fortunate. But Mr. Barlow is no less interested in the development of the educational side of a public school system thn he has been in extension of the building program. He brings to his duties as president of the board of education a well-trained mind, a responsiveness to educational ideas, and an independence of judgment that will insure to the New Rochelle schools an enlightened administration of school-board affairs.

some relationship between these scores and the fact that all of these pupils were mentally overage. The median I.Q. for the grade is 109. Jack, although he is over-age and has an I.Q. of 110, scored below the fifth-grade standard on two of the tests. Mandel was at the foot of the class in all three of the measures. He had been absent about half of the time, and had come in from a rural school in November. These two boys were retained in the fifth-grade group.

Continuity of School Program Essential

The success of a school as measured by the educational progress of its pupils depends largely upon the effectiveness of the instruction; and this in turn depends upon the practicability of the organization under which the instruction is administered. The classification of pupils by subject on the basis of achievement is purely an administrative problem. In order that such an administrative organization shall be successful it must be continuous. In smaller schools where superintendent and faculty are frequently changing hardly enough emphasis can be placed upon the importance of school records. The records of a school should be such that the incoming faculty can continue the organization and teaching procedures. Subject classification as developed at Buffalo Lake during the 1926-27 school year lends itself to such continuity.

At the end of the school year a record is left in the superintendent's office showing the grade placement for the coming year of each child in each of the grade groups in the various subjects. Table III shows that in September, 1927, Muriel was to take spelling in the sixth-grade group; Stanley was to take spelling in the fourth-grade group, etc. The table also gives the student's standard test scores and the quality of the classwork of the past year. The classification sheet for each class group contains the standards on the basis of which promotions or nonpromotions have been made. These standards have been previously outlined by grade and by subject.

(Continued on Page 144)

The Era of School-Board Conventions

State associations of school boards have come and gone, and school-board conventions have not been, on the whole, reliable in their annual reappearance. The idea, however, of bringing together once a year in common purpose those who are identified with the administration of the schools has had some tenacity and vitality.

There are quite a number of state school-board conventions whose attendance is large and whose deliberations are well worth the time that is spent upon them. In addition to them are the county school-board conventions, engaged in in several states. The subjects discussed are usually those which immediately concern the school officers. In the State of Wisconsin, for instance, such county conventions are encouraged by law in that each delegate who attends is allowed an expense account.

The Wisconsin Law

The law provides that "each member present shall be allowed \$4 for each day's attendance at the (county) convention, provided his certificate of attendance shall show that he was present at each session of the convention, and mileage at the rate of 3 cents per mile each way, going and returning from said meeting, said sum to be paid from any monies in the school-district treasury not otherwise appropriated. Such per diem and mileage shall be in full payment of all expenses incurred by each member while in attendance at the convention."

In discussing the subject, Mr. George E. Dick, who has conducted the county school board in the state of Wisconsin with remarkable success, says:

"The motive prompting the enactment of this law is plainly seen in the words 'for the purpose of consultation, advice, and instruction upon matters pertaining to the management of the These words express the desire that prompted the lawmakers. Their desire was to improve the public school and to strengthen the school in its service to the boys and girls and the people of this state. School-board members are selected from the best of busy men and women. Each one of these has a full life devoted to some particular business by which he expects to earn a living for himself and family and to store up a little for the future. Many of these people have had but little opportunity to be thoroughly prepared to take up the important work as business managers of the free public schools in which are to be educated the future citizens of this democratic form of government. There are no schools organized to give these men and women a preparation for this free public service thrust upon them by the votes of their neighbors. The law directs that little or no compensation shall be allowed these people for this valuable service of directing the education and training of the boys and girls. For one cause or another the annual turnover or change in school-board membership is large. Hence, the wisdom of the enactment of this law is very evident.

"The lawmakers placed upon the county superintendent the obligation of calling the convention annually. By doing this they recognized the county-superintendent district as a unit through the service of which they could reach the aim of improving general school conditions. Hence, the county superintendent endeavors to place before the school's business management the most helpful suggestions on organization and management of school grounds, buildings, furniture and furnishings. He also presents the latest and best ideas governing the teacher and her work in the school and community. value of the faithful service of a well-prepared experienced teacher is readily seen as is also the proper relationship between the teacher and the board, the teacher and the community. the

board and the people, and the relations of each one of these to the school. These aims are reached through the interchange of ideas and helpful instruction concerning subjects of mutual interest.

"The law provides that teachers of the county may be permitted by the school boards to attend these conventions without loss of salary for time spent at said conventions. As a result a very large per cent of these conventions are attended by nearly all the teachers of the county. Also many other persons interested in schools are in attendance.

"This year many members of the state legislature and new candidates for these lawmaking positions are attentive listeners and intelligent inquirers. There is an ever-increasing number of members of high-school boards coming with real problems from the home school districts. Teaching sisters from parochial schools are often very welcome members of the audience.

"When teachers and others are in attendance a special effort is made to suit talks and discussions to their problems. Many valuable questions are asked and helpful suggestions bringing forth helpful discussions come from teachers and visitors."

The Ends to be Achieved

Mr. Dick, because of his extended experience, speaks with considerable authority about the benefits derived from school-board gatherings. He says: "In the past nineteen years by the able cooperation, constructive work of the county superintendents and supervising teachers' much has been done. Marked improvements are evident in school grounds and buildings, in school furniture and furnishings. There has been great improvement in the service to school and to the people due to more vital teaching in the classroom and a broader idea of service to the community. In the past five years there has been great change in the general attitude of board members toward the effort put forth to help them give better schools for their communities. Seldom, if ever, is heard or seen a spirit of resentment toward the state department of public instruction. Board members usually leave the meeting happy, expressing appreciation for the help they have received and urging us to come back next year. This right attitude is essential if good is to result. The schoolboard members and teachers form the connection between the convention and the schools. If this good spirit makes them 'live wires' they carry back to their communities the good things they may have heard and the results are seen in the improved service rendered to the boys and girls in the public schools.

"Recently we have met in convention schoolboard members who have served their districts many years and who say they have been present at every convention since the law was passed.



These persons tell us that much has been accomplished in real good to the schools. One man said to us, 'I want you to know that the conventions have improved just as much as have the schools. This convention today was way ahead of the first one I attended.' This statement is worthy of consideration. It is true that the people advance in ideas and in ways of doing things no faster than leadership improves in higher ideals and in still better ways of doing things. We thanked the man for this compliment paid to the county superintendents, to the department of public instruction, and the many others who have had a part in this improved service rendered through the public schools.

Typical Program and Audience

"One way to judge of the value of the work of these conventions would be to see one in action. Since one can not be shown here it may not be out of place to give the following typical program of one day's work.

"The audience is composed of school-board members, teachers of the county, supervising teachers, county superintendents, and others interested in schools.

"1. The county superintendent gives a talk consisting of announcements of this plan, explaining the past and suggesting the work of himself and assistants for the coming year. He considers reports and other details of his office. This talk usually results in a clearer understanding and a better cooperation with the efforts put forth to make schools of the county more effective in service.

"2. An address by a representative of the state department of public instruction, who is always present. This year this address is New School Laws.

"3. An address by a representative of the state board of health on the conditions of publichealth problems in relation to the school, home, and community.

"4. A short address by a supervising teacher or perchance by the county farm agent.

"5. A second address by the representative from the department of public instruction. This year this address is prompted by needs of the particular county.

"6. A greatly appreciated 'question box'—
open to any person wishing to ask any question
on any phase of school conditions or work—its
organization, its administration, its management, its teaching processes or any of the school
laws governing any phase of public-school education.

"These questions, unsigned, are placed in the box. The county superintendent usually takes the questions from the box, one at a time, in the presence of the audience, and reads them aloud. The state representative discusses each question fully from the viewpoint of the Wisconsin school laws or from the latest approved ideas governing the other school problems. The audience is always at liberty to add oral questions, and usually this work is greatly prolonged by many oral questions prompted by the hearing of other questions of interest. The work of this part of the program lasts from one to three hours. People understand that after adjournment they are welcome to request any number of private interviews. Such free use is made of this privilege that often one or two hours more is necessary to satisfy those bringing problems to be solved. The number of questions, written and oral, often reach fifty or more. Even after the day's work many questions follow us to the office at Madison which questions are answered by a personal letter at an early date."

The Question Hour a Feature

One of the features of the county schoolboard convention is the question box. Members are permitted to ask questions. Mr. Dick not (Concluded on Page 135)

Traits and Qualifications of School Board Members in Ohio

Charles E. Hoel, Bexley High School, Columbus, Ohio, and C. C. McCracken, Professor of School Administration,
Ohio State University

Purpose of the Study

The purpose of this study is to group and analyze the traits and qualifications of the school-board members of Ohio, in order that some judgment may be placed upon their ability to serve the people of the state in the positions they hold. There are traits and qualities that are difficult to evaluate in these men and women who are willing to serve the public in the capacity of school-board members. High ideals of service that call for a willing sacrifice of time and effort are invaluable and immeasurable. Willingness and courage to cooperate with the administration in furthering the advance of the schools and of education in general are equally vital.

The purpose of this study is to determine the fitness of the members as shown in the amount of school training, success in business life, interests in the community, and in the public schools, and in service as board members.

Method of Procedure in the Study

The data used in this study were secured by mailing questionaries to superintendents of the various types of school districts in Ohio. These are the city, the exempted village, the county, and the local village and rural districts that come under the county organization. The study was made within the Department of School Administration of the Ohio State University.

Questionaries were mailed to the superintendents of the 88 counties of the state, 70 cities selected at random from the 93 city schools of the state, 30 exempted villages selected at random from 46 such villages in Ohio, and 100 local village and rural districts selected at random in such a way as to represent all of the counties of the state.

Returns were obtained from 35 cities, ranging in population from 5,500 to 87,000, from 15 exempted villages with populations varying from 3,100 to 4,900, from 60 local village and rural districts including no village having a population over 2,960, and from 79 counties. The local school districts replying represent 32 counties of the state.

The Education of the Board Members

The school board controls, if not directly, the management and the administration of the nation's greatest venture, that of effecting and shaping a type of citizenry that will safeguard and further the development of our democratic institutions. At the basis of this citizenry rests the security and the efficiency of all our business, industrial and social organizations. For the accomplishment of this purpose, the school board controls the expenditure of large sums of the public money. It is fair, then, to assume that any man or woman who is to participate in such responsibilities as these should possess a high type of character and a liberal education. The public should be interested in the fitness of the persons who are to assume such duties and responsibilities for them.

This opportunity and responsibility should challenge the attention of the most worthy men and women to offer their service in the advancement of education. But instead of this, as many superintendents stated, well qualified men need to be coaxed and persuaded to accept positions on school boards. This field needs leaders, business men and efficient administrators, men who have a type of education and a character that fit them to understand and appreciate the importance and the function of schools in a society like ours. It would seem rather difficult, no matter how excellent his character and attitude is toward this service, for a man to perform efficiently his duties in solving the prob-

lems of the schools or in selecting well-qualified administrators to do this work unless he himself possesses a suitable training. The more familiar he is with the schools by possessing a good education, the more able he should be to help administer them.

After this study of the education of the board members of the state, it is evident that the training of the whole membership is not entirely satisfactory. There are found, however, many individuals who do have an education that should well fit them for their service. These were found to be well distributed among the various boards so that the greater number of boards do have well-educated leaders.

MEMBERS OF	DUCATION OF THE VA	RIOUS	THE E	OARD TS
	Exempted		Rural and	
Schooling City			Village	Total
Elementary:	Tinage	county	v mage	Total
5 0.0	0.0	0.5	2.0	0.9
6 0.6	1.3	0.5	2.0	1.2
7 0.0	0.0	0.0	0.6	0.3
8 16.2	22.7	43.0	55.6	40.7
High School				
1 2.4	0.0	2.8	2.6	2.5
2 7.2	1.3	4.6	7.2	5.8
3 7.2	10.7	2.3	5.6	2.9
4 20.3*	22.7	20.4	12.6	18.1
College:				
1 1.2	6.7	4.3	0.0	2.5
2 10.8	2.6	5.7	3.6	5.8
3 1.8	1.3	2.3	0.6	1.9
4 23.3	22.7	11.8	6.0	13.0
5 6.0	2.7	0.5	0.0	1.5
6 3.0	2.7	0.8	0.0	1.5
7 0.0	0.0	0.3	1.0	0.5
8 0.0	2.7	0.0	0.6	0.4
Number of				
board members				
studied167	75	388	301	931

*Group in which median is found.

Table I gives the amount of education that the members of the different boards have received. The number given for each grade is the per cent of the members who reached and completed that grade only. This table makes possible a comparison of the education of the members of the boards of the different types of school districts. By summing up the per cents from the fifth to the eighth grade inclusive, it will be seen that the following have no more than an elementary school training:

Classification	Per cent
City	 16.8
Exempted Village	 24.0
County	
Village and Rural	 60.2
All	 43.0
	 2 2 2 (30

By summing up the per cents for the different years of the high school it will be seen that the following have had from one to four years of high-school training only.

Class	sifica	tion				Per cent
City .				 		. 37.1
Exemp	ted	Village		 		. 34.7
County				 		. 30.1
Village	and	Rura	1 .	 		. 28.0
All				 		. 29.3
73			. 3		0.1	1

By summing up the per cents of the members who have had college training it will be noted

that the following have had from one to eight years of college training.

Classification	F	er cen
City		46.1
Exempted Village		41.3
County		25.7
Village and Rural		11.8
All		

Fifty-five of the city, 23 of the exempted village, 53 of the county, and 23 of the local rural and village board members have college degrees. Out of a total of 931 members studied, there are 154 who have college degrees. The per cent of members holding degrees are as follows:

Classification	Per cent
City	33.0
Exempted Village	30.6
County	13.6
Village and Rural	7.6
All	16.5
A141 1 4 1 6 41 4	

Although a study of the per cents given in Table I affords the best means of comparing the education of the members now serving on the different boards, the median number of years of training is located and the arithmetic mean computed. The following are the arithmetical means, or average amount, of training for each group:

Classification	Years
City	12.72
Exempted Village	12.45
County	10.72
Village and Rural	9.05
For all	10.35

The median number of years of training for the city and the exempted village board members lies in the fourth year of the high school; for the county board members, in the second year of high school; for the rural and village board members, in the eighth year of the elementary school; and for the total number of the members studied, within the second year of high school. These figures and per cents are based upon 167 city, 75 exempted village, 388 county, and 301 rural and village board members.

Table II gives some idea as to the general distribution of the members of the various boards with regard to the type of education possessed by their personnel. Out of the total of 189 board studies, there are 27 with all members having an elementary training only. More than half of this number, 17, are local rural and village boards.

There are 27 city, 11 exempted village, 33 county, and 17 rural and village boards that have at least one member who has a college degree. There is one city and one county board having all members with college degrees.

Superintendents pointed out on the questionaries the member who ranked highest and the one who ranked lowest in usefulness. The arithmetical mean of the training of the members ranking highest is 11.88 years, while that of those ranking lowest is 10.40 years. Of those ranked highest, 59 per cent were high-school graduates, while only 37 per cent of those ranked lowest were high-school graduates. Twenty per cent of the members ranked highest were college graduates, while 13 per cent of those ranked lowest have graduated from college.

Occupations of the Board Members

Table III gives the different kinds of occupations and the per cent of the board members engaged in each kind. The farmer group includes

TABLE II. CHARACTER OF THE BOARDS STUDIE MEMBI		RELATION TO	THE EDU	CATION OF	THEIR
ALE:ALE:	City	Exempted Village	County	Rural and Village	Total
Per cent of boards having all members with elementary training only Per cent of boards baving one or more members who	0.0	6.7	11.4	28.3	14.3
have one or more years in high school. None with college	11.4	13.3	35.4	40.0	30.7
Per cent of boards having one or more members with one to three years of college	8.6	6.7	11.5	3.4	18.2
Per cent of boards having one or more members with a college degree	80.0	73.3	41.7	28.3	46.8

farmers, gardeners, and horticulturists. In the business group are placed all of the men whom the superintendents designated as merchants, contractors, real-estate men and insurance agents, salesmen, druggists, oil dealers, livestock dealers, printers, lumber dealers, barbers, millers, and a few others. The clerical workers are mostly bookkeepers and accountants. Dentists are included with the physicians.

TABLE III. OCCUPATION OF THE BOARD MEMBERS

		T7 -		Daniel	
		Ex-		Rural	
		empted		and	
Occupation	City	village	County		
Farmers	1.8	9.3	63.7	65.3	48.8
Business men	34.1	37.3	14.6	14.0	19.8
Physicians	10.9	12.0	5.2	2.0	5.8
Homemakers (women)	7.8	5.3	2.9	6.0	5.0
Bankers	7.8	10.7	4.7	2.0	4.9
Clerical work	9.1	5.3	0.3	2.7	3.0
Employees	1.2	1.3	1.6	4.3	2.4
Manufacturers		2.7	1.0	0.3	2.7
Lawvers		2.7	1.6	0.7	1.7
Teachers	1.8	2.7	1.6	0.7	1.4
All others	13.3	10.7	2.9	2.0	4.0
Total number of mem-					
bers reported	165	75	383	300	923

A large number of the board members own their business, or an interest in it, and their homes. The following gives the per cent of the members of the various boards who own their business or a part of it:

Grouping	P	er cent
City board members		
Exempted village board members		. 75
County board members		
Village and rural board members		
All board members studied		. 84

The per cents of the members who own their homes are as follows:

Grouping	cent
City board members	 94
Exempted village board members	 96
County board members	 99
Village and rural board members	 89
All board members studied	 95

The fact that fewer members of the city and exempted village boards own their business is likely due to the type of occupation in which they are engaged. These per cents are based upon 170 city, 75 exempted village, 389 county, and 306 village and rural board members.

Superintendents were asked to rate the success of each member in his own business or occupation as being excellent, good, fair, or poor. Ninety-three per cent of the city board members, 92 per cent of the exempted village, 87 per cent of the county, and 81 per cent of the local village rural board members were rated as good or excellent; while 7 per cent of the city, 8 per cent of the exempted village, 13 per cent of the county, and 19 per cent of the village and rural schools were rated as being poor or fair. Eighty-seven per cent of the total number of members were rated as good or excellent, 13 per cent as poor or fair in their business success.

Among the board members whom the superintendents ranked as being the most valuable on their boards of education there are 61 farmers, 49 business men, 16 physicians, 10 bankers, 6 lawyers, 5 employees, 5 clerical workers, and 4 homemakers. Among those who were rated as being the least valuable on their boards there are 78 farmers, 33 business men, 6 physicians, 5 bankers, 1 lawyer, 10 employees, 3 clerical workers, and 10 homemakers.

Converting these numbers into per cents based upon the total number of all members in each occupation serving upon the boards, the following results are secured:

	Per cent Most	Per cent Least
Classification	Valuable	Valuable
Farmers	13.5	17.5
Business men	23,5	11.0
Physicians		11.0
Bankers		11.0
Lawyers	38.0	6.0
Employees	22.0	46.0
Clerical workers		10.0
Women	9.0	22.0

Basing the per cents upon the number ranked most valuable and the number ranked least valuable the following results are secured:

	Per cent Most	Per cent Least
Classification	Valuable	Valuable
Farmers	39	53
Business men	31	23
Physicians	10	4
Bankers		3
Lawyers		1
Employees	3	7
Clerical workers	3	2
Women		7

Among the members who were rated as being the most valuable on their boards there are 75 men, or 47 per cent, pointed out as having excellent success, 74 men, or 47 per cent, having good, and 9 men, or 6 per cent, having fair success; of those who were rated as the least valuable members there are 30 members, or 21 per cent, having excellent, 78 members, or 53 per cent, having good, 30 members or 21 per cent, having fair, and 8 members, or 5 per cent, having poor success in their own business affairs.

Interest in the Public Schools

One of the desired characteristics of a board member is that he be interested in the welfare of children and in a good education for them. In this study his direct or indirect interest in the schools as shown by his having had teaching experience, having children in school, visiting schools, reading of educational magazines, and attending educational meetings, are taken as indications of such interest.

Two hundred and forty-one board members, or 25 per cent of the number in this study, have served as teachers in the public schools. Twenty-six per cent of the city, 21 per cent of the exempted village, 33 per cent of the county, and 17 per cent of the village and rural board members have had some teaching experience. Thirty-five per cent of the members ranked as being the most valuable members on the boards and 16 per cent of those rated as being the least valuable members have had some teaching experience.

A large number of the board members do have children attending school, in elementary, high school, or college. Below is given the per cents of the board members of the different boards that have children in school:

t mile children in senson.	
Group	Per cent
City	. 74
Exempted village	. 85
County	. 62
Rural and village	. 82
Total number	. 73

Of the number rated as most valuable members of the boards, 80 per cent have children in school; while, of the number rated as being the least valuable, 67 per cent have children in school. The above figures as well as those on the teaching experience of members are based upon 167 city, 75 exempted village, 386 county, and 298 village and rural board members.

One hundred twenty-six board members have children teaching in elementary, high school, or college. Eleven per cent of the city board members, 5 per cent of the exempted village board members, 19 per cent of the county board members, and 10 per cent of the rural and village board members have children teaching.

A check on the questionaries showed that there are only 18 members, or 11 per cent, of the city, 7 or 9 per cent of the exempted village, 73 or 19 per cent of the county, and 32 or 10 per cent of the village and rural members who have neither teaching experience, nor children in school, nor children teaching. Thus about 14 per cent of the members of the state have had none of the school contracts described above.

The answers to the questions as to the number and kind of educational magazines read by the board members were too incomplete and indefinite to place very much value upon them. It is evident that most superintendents do not know whether their members read magazines pertaining to educational matters or not. In a number of cases whole boards were reported as readers of some one educational magazine.

Forty-nine of the county board members, 80 of the city, 3 of the exempted village, and 29 of the rural and village were reported as readers of some educational magazine. The magazines reported as being read were the American School Board Journal, the N. E. A. magazines, and Ohio teachers' papers. The School Board Journal was the most frequently mentioned.

Attendance at Educational Meetings

Superintendents reported that 15 per cent of the city, 21 per cent of the exempted village, 66 per cent of the county, and 34 per cent of the village and rural board members occasionally attended educational meetings. No statement can be made as to the frequency of attendance at these meetings, but it is likely that most members do not regularly attend them. The higher per cent of county board members may be due to the fact that some superintendents reported the general meetings of the boards of the county as educational meetings. The kind of meetings mentioned were county teachers' institutes, state teachers' meetings, state district teachers' meetings, P. T. A. meetings and the general board meetings of the county.

Only 50 per cent of the members of each of the different groups of boards were reported as visiting the school any time during the second year. These visits were, in the most, very infrequent, only a few for each person during the year. Nothing was given as to the purpose and the character of these visits. Hence the data secured on this question are not very significant.

Community Interests of the Board Members
Church membership is not to be taken as an index of any cort as to the worth of a man or woman on the board of education, but rather as an index of their general interest in the community. The church itself stands for worthwhile things and an affiliation with it would, in a degree, show the attitude of the average individual toward community welfare. Although different creeds are here listed, no emphasis is placed upon this phase other than of general church membership. Creeds are here listed as an item of interest. The number of members belonging to the various denominations is shown in Table IV.

TABLE IV. NUMBER OF MEMBERS BELONGING TO DIFFERENT CHURCH DENOMINATIONS

	Exempte	d		
Denomination City		County	Local	Total
Methodist 53		118	86	282
Presbyterian 41	14	46	20	121
Lutheran 12	7	27	10	56
Christian 8	5	10	22	45
Congregational 13	6	17	7	43
Baptist 5	5	10	11	31
United Brethren 4	0	16	8	28
Reformed 2	. 2	9	15	28
Disciple 2	0	12	11	25
Friends 3	0	10	3	16
Church of Christ. 2	1	5	6	14
Episcopal 6	1	4	1	12
Catholic 0	0	5	5	10
Evangelical 2	2	4	2	10
All others 4	4	26	23	57
Number not mem-				
bers of any				
church 5	3	62	68	141
Number of mem-				
bers reported165	75	381	298	919

Eighty-four per cent of the total number of board members studied are affiliated with some church. The per cent of the members of the different boards that are members of church are as follows:

Classification	Per cent
City	95
Exempted village	96
County	84
Village and rural	77

The per cent of the total number of members belonging to the different church denominations are as follows:

0 000	TOTTO	44 13																								
	enomi																								P	er cent
Meth	nodist				٠	0	9 .	0 .			 	 					۰									31.0
Pres	byter	iar	ì								 													Ī		13.0
Luth	ieran														Ì							Ĭ	Ĭ	Ĵ	·	6.0
Chri	stian															•	ũ			•	ì	Ĩ	•	•	•	5.0
Cons	rega	tion	n	al	is	t	g								-					•	•	^	•	•	•	5.0
Bapt	tists														-	Ī	ï	•	•	•	•	•	•	î	•	3.0
Unit	ed B	ret	h	re	n										Ĭ		Ĭ					·	ľ	Ī		3.0
Refo	rmed								Ĭ.							Ì	Ů	•				•	•	•		3.0
Disc	iple															ì	•	•	•	•	•	•	•	*	*	2.7
Frie	nda																				-	_	_	۰		1.7

Church of	C	h	ri	S	t																			1.5
Episcopal																								1.3
Catholic .																								1.0
Evangelica	1																						4	1.0
All others																								6.0
Not memb	er	8	0	f		a	T	17	v	c	h	1	1	r	h					_				15.4

Seventy per cent of the board members in the study were reported as being members of some type of civic club or organization. The per cent of the members of the various boards belonging to these organizations are as follows:

Grouping	Per cent
City	74
Exempted village	72
County	
Village and rural	52

Table V gives a list of the ten clubs most frequently mentioned as organizations with which board members were affiliated. Each number represents the number of board members who belonged to that club. Many are members of two or more different clubs. Forty-one city, 21

TABLE	v.	CLUB	MEMBERSHIE
		T.	aromatod.

	Taxempe	cu		
Organization City	village	County	Local	Total
Farm Bureau 0	2	176	45	223
Grange 0	5	135	56	196
Chamber of Commerce46	1	7	6	60
Business Men's Clubs 3	8	26	15	52
Kiwanis25	13	6	1	45
Rotary31	6	5	2	44
Civics Club14	3	11	5	33
Parent-Teacher 2	1	10	13	26
Community Club 1	6	2	7	16
Woman's Club 9	0	3	1	13
All other clubs11	7	17	1	36

exempted village, 89 county, and 125 village and rural board members were reported as being members of no club of civic character; while 119 city, 54 exempted village, 294 county, and 137 rural and village board members were reported as belonging to some such organization as listed above.

Seventeen per cent of the members belonging to these clubs were rated as the most valuable member on their boards, and 12 per cent were rated as the least valuable members; while 13 per cent of the members not belonging to any of these clubs were rated as the most valuable members on their boards, and 12 per cent were rated as the least valuable members. Seventyfour per cent of those rated as the best board members are club members, while 54 per cent of the members rated as the least valuable are club members.

Degree of Openmindedness

Superintendents rated the degree of openmindedness of their board members as being excellent, good, fair, or poor. A summary of the ratings in per cent of members rated from good to excellent in the judgment of the superintendent is as follows:

Grouping	Per cent
City	89
Exempted village	80
County	
Village and rural	72
A11	80

The remaining members were rated as being fair or poor. Twelve per cent of the members studied were marked as being prejudiced in some way.

The following gives the rating of the 146 members pointed out as being the most valuable members on their boards:

Ratin																					fembers
Excelle	n	t	١			 										 					52
Good .			۰				0		 										٠		41
Fair .						 			 							 					7
Poor .																 					0

The following gives the rating of the degree of openmindedness of the 146 members rated as being the least valuable on their boards:

Rat	ir	1	g												I	9	eı	r	e	e	n	ıt	-	0	f	t	h	16	9	7	Member
Excel	le	I	1	t																											. 14
Good							 	 																							. 38
Fair																															. 38
Poor												0																			10

Service of Board Members

Length of service might be considered as an indication of a board member's ability and willingness to serve his community in such capacity. Table VI is a tabulation of the length of service of the four types of board members.



A REPRESENTATIVE BOARD OF EDUCATION

The board of education of Kalamazoo, Mich., is a seven-member body, composed of six men and one woman. They include the following: Mr. C. Arthur Krill; treasurer; Dr. D. J. Scholten, H. W. Anderson, secretary; Otis A. Earl, president; John S. Rockwell, vice-president; E. H. Drake, superintendent of schools; Mrs. Linnie Gill, and Earl S.

TABLE VI. LENGTH OF SERVICE OF BOARD

The fine cooperation of the board with employees of all departments of the schools, the press, various social, religious, and business organizations, and the commendable attitude of the citizens, have resulted in the development of a school system which has won wide recognition. Several departments of the school system are in the front rank, and some are considered as occupying first place among the educational systems of the country.

		MEME	BERS		
No. of yrs.		Exempted		Rural and	
of service	City	village	County	village	Tota
1	23	11	35	73	142
2	13	5	79	38	135
3	29	12	28	33	102
4	13	, 8	111	33	165
5	15	9	17	22	63
6	13	5	20	20	58
7	6	2	12	11	31
8	11	3	17	17	48
0	75	63	e.	11	9.1

1	-3	11	99	10	192
2	13	5	79	38	135
2 3	29	12	28	33	102
4	13	, 8	111	33	165
5	15	9	17	22	63
6	13	5	20	20	58
7	6	2	12	11	31
8	11	3	17	17	48
9	5	2	6	11	24
10	4	4	7	7	22
11	1	2	61	2	66
12	8	4	0	8	20
1:3	1	2	0	0	3
14	5	0	0	0	5
15	4	1	0	0	5 8 8
16-20	3	2	0	3	8
21-25	3	1	0	0	4
26-30	1	0	0	0	1
36	1	0	0	0	1
Total No.	159	73	393	281	906
Mean yrs.	6.4	5.9	4.9	4.3	4.9
Median yr	s. 5.1	5.1	4.5	3.9	4.5

County boards had been established for only eleven full years when these data were secured. In addition to their service upon the county boards, 276 members, or 70 per cent of the county boards have had service upon local boards. The range in years of this service for these members is from 1 to 35 years; the mean is 9.7 years and the median, 8.8 years. None of the city or exempted village members and only 3 of the village and rural members have had any service upon county boards.

In comparing the length of service of the most valuable members and least valuable members on the boards of education the following results were secured.

	Most Valuable	Least Valuable	For All Members
	Years	Years	Years
Range	1-30	1.20	1-36
Arithmetic Mean	7.4	4.7	4.9
Median	40.00	3.5	4.5

The following is a summary of the data secured as to the number of board meetings held during the year covered by this study:

These data are based upon 28 city, 14 exempted village, 74 county, and 55 village and rural school boards.

City	Exempted Village	County	Village and Rural
Range of meetings for	v mage	County	Rulai
the year 12-35	12-20	6-28	2-29
Mean number of meet-			
ings 19.8	15.2	11.3	14.2
Median number of	45.5	40.0	
meetings 19.5	15.5	12.2	14.3

The per cent of attendance of the members for each of these groups is as follows:

	Per cent
City	. 89
Exempted village	88
County	
Village and rural	. 87
For all	. 89

The per cent of attendance at board meetings of the members rated as being the most valuable on their boards was 93 per cent, while that of the least valuable was 87 per cent.

Desirable Traits and Qualifications of School-**Board Members**

Table VII presents the desirable traits and qualifications of school-board members as listed by the superintendent answering the questionaries. The number represents the frequency of the traits or qualifications listed by all of the superintendents. In addition to the desirable traits mentioned in the table there were a number of others appearing less than five times. Among these were regularity of attendance at meetings, unselfishness, teaching experience, no teaching experience, sympathetic, property owner, professional man, tolerant, patriotic, good citizen, diplomatic, and experience as an administrator.

Summary

In conclusion the four groups of board members rank in the same order with the exception of one item. This rank is city boards, exempted village boards, county boards, and village and rural boards. The exception to this rank is in the case of ownership of home wherein the county board members rank first with 99 per cent of the members owning their own homes, (Concluded on Page 144)

TABLE VIL DESIRABLE TRAITS AND QUALIFICATIONS OF SCHOOL ROARD MEMBERS

TABLE VII. DESIRABLE TRAITS AND QUAL	RE BUZ	HIDS OF SCHIL	JOL-DOWER	MIEMIDE IVS	
	City	Exempted village	County	Local	Total
Open minded	21	9	36	36	102
Having a good education	9	44	55	20	88
Having interest in children and schools for them	15	9	36	27	. 87
Having success in their own business	10	5	29	24	68
Willingness to cooperate with superintendent	18	13	7	13	51
Good judgment	8	5	17	10	40
Progressive	7	5	15	7	34
Good character	5	1	12	15	33
Community interest	5	4	11	3	23
Having children in school	1	1	11	6	19
Broad vision of modern education	0	0	13	0	13
Leader in the community	5	0	3	3	11
Having courage	2	0	8	0	10
Willing to pay for good service	3	0	3	1	7
Willing to give time	0	0	5	0	5
Christian, religious	1	1	3	0	5
Number of superintendents answering	35	15	79	60	189

Keeping the Faith

H. M. Bucher

"Municipal financing" is a broad term and should include two classifications—temporary financing, which is usually availed of in anticipation of collection of levied taxes, and longtime financing, as applied to municipal bonds. The term "municipal bonds" is generally used to designate tax-secured bonds whether issued by cities, counties, school districts, or any other political subdivision.

The intrinsic goodness of a municipal bond is dependent on three things: First may be listed the physical ability of the issuing municipality to meet its obligations. Second, is the ability of bondholders to enforce, through mandamus or otherwise, the payment of such obligations. Third and last, but by no means least important, is the desire and willingness of the taxpayers and officials to meet payments promptly and to keep clean the record of the borrower.

Municipal financing is commercial banking as viewed with a telescope. In many cases a generation not yet born will pay the taxes to retire maturing bonds of present-day issues. This means that the investment banker must use the greatest discretion in making loans.

Borrower Has Full Control

The trust indenture given by private corporations to secure long-term borrowing usually contains provisions which permit the lender to keep careful check on the affairs of the borrower so that any tendency toward depreciation of security may be quickly halted. This is not true as regards bonds issued by municipalities and for this reason the conservancy and reliability of the community seeking funds is of the greatest importance.

In effect, a group of public officials seeking funds says to the investment banker: "We desire to borrow money and will agree to have levied each year a tax for the payment of interest and the repayment of principal. The failure of ourselves and of our successors to levy and collect this tax gives you no recourse except through the courts, and you may not seize the property pledged unless you acquire it through tax title and to do this you yourself or your clients must pay the taxes due on your bonds. We do not know that we will be in office for any stated period, and we do not know who our successors will be. We can give you no mortgage, and we cannot assure you that we will not issue more bonds next year or the year following; and if we do borrow more money you will have no priority of collection as against holders of bonds issued ten years hence. You have no control over our property and we may abandon it or allow it to depreciate as we see fit. But we do want a low rate of interest and favorable terms."

The Citizen is Best Security

However, the experience of the investment banker tells him that the American citizen is very proud of good credit rating and will in most cases make the greatest effort to keep good the credit of his community. There are many cases on record where municipal loans have been met by public subscription when the decline of assessed valuations, bank failures, or some other cause prevented the prompt payment of bonded debt. The remarkably small amount of loss incurred by holders of municipal obligations well demonstrates that good faith and pride of a collective group of average citizens is about the best possible security for municipal

Several school districts and smaller cities have greatly injured their credit through carelessness, indifference, or failure to appreciate the importance of promptly meeting interest and principal payments. The investor in municipal bonds is usually one willing to surrender a large potential return in order to obtain the greatest possible factor of safety. The trait that leads him to put his funds in these securities causes him to expect and insist on prompt payment. The return to him of an unpaid coupon usually brings him to his invesment banker for an explanation. The banker then wires the municipal treasurer for information and in most cases receives a reply that in substance says: "Forgot to send money to place of payment, but funds going forward today." A constant recurrence of this condition (and there are many) will make the banker very hesitant about placing additional funds in that municipality, as he can look forward to semiannual, irritating demands for explanations over the life of the bonds. He also knows that holders of the old bonds will decline to purchase the new, and in time that particular community will pay dearly for its omissions.

It is indeed fortunate that almost every school district has some faithful citizen who makes the affairs of the district his own affairs, who realizes the vital importance of the interest and principal due notice, and who makes it his personal business to see that funds are at place of payment as agreed.

From the Teachers' Agency Viewpoint

Emily Guiwits

"Why," inquired the superintendent, "did you cross out the statement that Miss Mynes is not personally attractive?"

"Because she is personally attractive," answered the teachers' agency manager. "Unless it happens that one can find no charm in a woman of 35!" The two pairs of eyes met in a glance almost hostile, yet with a gleam of mutual respect.

"Then may I further inquire," continued the superintendent, "to what extent you carry this practice of-editing recommendations?"

"To exactly the extent that fidelity to fact demands," replied the manager. "Never at all, where statements touching proficiency are concerned. Other points merely indicate personal A superintendent partial to blondes, for instance, could scarcely be expected to call a dark girl attractive!" Again two pairs of eyes glared at each other, until the humor of the situation become irresistible, and both laughed.

"All right, you win," conceded the superintendent. "Bring along your attractive candidate and I'll talk with her at 4 o'clock today." The door closed; swift footsteps sounded along the hall, and in a moment the elevator stopped for its passenger.

The agency manager leaned back in her chair wearily. What did it amount to, anyway-this never-ending effort to fit teachers into positions -to harmonize the varying temperaments of superintendents and teachers and school boards? For three years she had tried in vain to locate a teacher with Superintendent Carleton; today, when success at least was peering around the corner-what if Miss Mynes should be given the position, and should fail? "We are expected to guarantee human nature," she thought, resentfully. "No one else is expected

to do this. After sending five successful teachers to a school, suppose the sixth is a misfit. Neither superintendent nor board remember the five-but they are never through reminding us of the one!"

A Matter of Deep Concern

Many employers and candidates applying to a teachers' agency assume that the manager thinks only of the commission, caring little for the success of the teacher in the job. This assumption is unfair and untrue. No manager living can always hit the mark. Too often applicants must be judged from brief interviews. or through correspondence alone; again the manager may be unacquainted with both applicant and employer. A school year is a goodsize fraction of a human life. The locating of any teacher, especially a beginner, in a town where she will work for nine months is a matter of deep concern to an agency manager. The teacher's success or failure is reflected in her superintendent's record and still more vitally in her pupils' development. A misfit teacher cannot be wholly successful; yet who can tell in advance whether any teacher will fit in a new position? Even after years of experience in agency work, learning the individual requirements of many schools and many superintendents, the element of uncertainty persists. One never can tell when a teacher has reached her high-water mark in development which makes it unsafe to push her ahead still further. Nor can one feel wholly safe in locating a smalltown candidate in a city school, or a city candidate in the small town. Every agency has at some time come to grief through taking this risk. Adaptability is sadly lacking in teachers. as in other humans; and try hard as she may to fit the right teacher into each job, the agency manager is bound to make mistakes.

Temperament and Varying Environments Public schools have distinct personalities: a

teacher who will fit in one will be a misfit in another of similar size a hundred miles away. In Dashville, for example, the teacher should be of the social type; she must dress well and be at ease in social groups; and if she dances and plays cards, these things will insure her popularity in the town. In Dotville, on the contrary, her interest in the woman's club, the parent-teacher association, and in church work are the points stressed. A third town will wear the teacher out with dinner invitations, even a teacher socially inclined; while in another town not far distant the young woman teacher is absolutely ignored: not a friendly invitation during the school year will come her way. It is easy to see to what extent the temperament of the young teacher must be considered in locating her in these widely varying environments.

More often than one would expect it is the duty of the agency manager to advise candidates to leave the teaching profession. many have gone into this work because they didn't know what else to do, and are staying in it from lack of courage to make a change. A conscientious manager will not recommend a teacher who dislikes her work. The great need in teacher-training schools today is for vocational guidance worthy of the name-not merely another faculty job to be filled by an uninspired theorist. It is a question if the supply ever would equal the demand for persons really qualified to give advice to these bewildered freshmen. Such advisers need more than formal training; there is needed a large degree of intuition; and most of all it requires time and patience, two things sadly lacking in college life.

The Tragedy of the Teacher Surplus

The last weeks of summer vacation are the ones that try an agency manager's soul. The number of teachers and jobs is never balanced; either there are too many teachers or not enough to supply the schools. This last season vacancies were scarce and applicants many; as the days went by the anxiety of candidates became more definite, and the manager shared this distress but was powerless to relieve it. No agency can make vacancies nor transform candidates so that they will fit in the vacancies reported. Yet when day after day these applicants came in to talks things over-the laughter gone from their eyes, the lines of their faces deepening, and a tenseness showing their panicky need for work, the manager's problem took on new complications.

Many teachers have relatives to support: indeed it is the exception if one escapes such burdens. Just where does an agency manager's duty lie? She may have a call for a mathematics teacher for Dotville: here is Mary Jones whose training and teaching record are exceptional. Mary did not expect to teach this year, but suddenly became available. To send her to Dotville would give a prize to this superintendent and school. But Mary does not really need the job. And here is Sally Brown, who would do the work moderately well and probably be reelected, but Sally is not an exceptional teacher-yet she has a widowed mother to support. Is it the duty of the manager to give the school the best teacher on the list and send Mary, or is it her duty to consider these other points and give Sally the job? Running a teachers' agency is not a matter of mere bookkeeping-of lists of subjects coupled with names. It is a matter of dealing with human

A Superintendent's Letter

To the Principals:

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The instructions given to you yesterday by telephone from my office were based on the rule of the school board that no unauthorized collections shall be made, nor donations solicited in the schools. This regulation applies in the case of teachers as well as in the case of pupils.

Since it had come to my attention that the regulation was being violated in one school, it was my duty to call attention to the rule, although most of you may have thought that the whole matter was so well understood that it was not necessary to mention it.

The whole question of drives in schools is one which is at this time receiving the attention and consideration of school administrators and school boards throughout the country. Many city school boards have, during the last few months, adopted regulations similar to the one which has been in effect here for several

A principle of democracy is involved in the question of drives in schools. A drive in the schools represents the capitalization of the school organization for other than educational purposes. Donations for any cause, however worthy it may be, must be entirely voluntary or else the principle of democracy is violated. The spirit as well as the letter of the principle must be observed if the principle is to be respected.

To circulate among the teachers of a school a paper on which "those who wish to contribute may write their names with the amounts contributed," is a violation of the spirit of voluntary individual giving, because such a paper records not only those who do contribute but also those who don't. In such procedure there is a powerful coercion although it may be unintentional.

If the school principal is known to be interested, even though rightfully and creditably in the cause of the drive the teachers naturally feel it incumbent upon them to sign up regardless of their individual inclination or financial ability to do so, therefore any plan for "100-percent record" by the teachers of a school building takes away from the teachers the right to private and unrecorded decisions in regard to contributions.

I think I do not need to say to you that my action is not "aimed" at the drive of any particular organization. As a matter of fact, I consider the organization whose drive is now being conducted a very worthy one. It does a great deal of good work; It deserves the support of school people as individuals.

Physicians contribute as individuals and are not grouped or listed as a profession even in a health drive. School teachers should be accorded the privilege of deciding as individuals whether they want to give.

I am certain that the officers who are responsible for the present drive will agree heartily with the justice of our rule on drives in the schools.

Very truly yours, Superintendent of schools

Objective Measurement of Teacher-Traits

Barney K. Baker, Associate Professor of Education, State Teachers' College, Peru, Nebr.

The purchasing public of the present day need no longer buy in the dark. Commodities are described in specific terms of grade, strength, or Seventy-five per cent virgin-wool blankets, 14 wires-to-the-inch screen, number one wheat—these and many more articles are described in terms that have objective meaning. Specifications employed by architects and contractors in qualifying the type and grade of materials used in construction help the purchaser evaluate the house he is buying. The use of terms with a fixed, specific meaning obviates misunderstanding and fraud.

School officials have previously, to the school's lyantage, adapted commercial practices educational needs. Why should not objective terms be used in describing the teachers'-college product, the teacher?

Classification of Teachers

We now classify teachers in terms that are often misleading. "Good teacher" may suggest various qualities to various people. To one superintendent it may mean ability to conduct a class efficiently. To another it may mean ability to cooperate with her colleagues and superiors. To the school-board member the term "good teacher" may mean ability to control school children without the use of severe discipline. To the patron it may mean tact and the social graces. Lauding or disparaging a teacher because of some one quality which she may or may not possess makes such terminology as "fine teacher," "poor teacher," indefinite. The personal factor, also, makes the recommendations of teachers vague. The mediocre work of a friend may be "good"; the superior work of an antagonist, "fair." Why not assign objective meanings to the descriptive terms used in classifying and recommending teachers? Then school officials will, in this matter, speak a common language.

The author does not mean to imply that objective measurement of teacher-traits is to supplant entirely personal judgment. There are, of course, many elements in personalities which the experienced administrator will readily sense in an interview, but which are difficult to define and to measure objectively. Refinement of manner, gracious deference, and similar qualities are still to be determined by personal acumen. Aside from the more intangible qualities there are, however, many traits which readily lend themselves to objective measurement.

We lack standard units of measure for such teacher-traits as can be measured. One often hears the expression average, superior inferior, scholarship. Do those terms mean to the reader the same degree of attainment that they meant to the author? Good scholarship can be measured objectively by the grade-index scheme, which assigns a point value to each mark or grade. An A grade usually gives the prospective teacher three points; a B grade, two points; a C grade, one point; lower grades, no points. To arrive at an objective measure of scholarship, add the total number of point hours and divide the sum obtained by the total number of semester hours earned. .The quotient obtained will give the grade index. If, in discussing a teachers' scholarship, we should say that she has a grade index of three, we would mean that her scholastic attainments were of the highest rank. Naturally, the grade index should be based upon all the collegiate courses rather than upon the major subject, if one is to secure an accurate and comprehensive measure of scholarship. We continue to measure by guess, however, the prospective teacher's scholastic achievements when we might use a standard unit of measure.

General intelligence is now measured objectively and successfully. Why not speak of a teacher's intelligence in terms of the IQ or the percentile ranking, instead of using the old, loose phraseology? We should designate a teacher's intelligence as normal when her IQ is between 90 and 109 or her percentile ranking falls between 400 and 600. The recommendation "normal intelligence" would then have concrete meaning.

When teachers'-college graduates try to secure positions, they (unless they have actually been under contract in the field) find themselves classed as inexperienced. The statement that they have done "student teaching" does not alter the public's estimate of them as inexperienced. One of their assets is discounted because of the indefiniteness with which the terms "student teaching," "practice teaching," are employed. The school official selecting teachers knows that "student teaching" may mean much or no actual teaching; it may mean absolute control of a class for three days or three months; or it may mean assisting in which the student-teacher only grades papers and cares for the equipment. Greater objectivity in describing the apprenticeship of the teachers'-college student is certainly needed.

Determining Ability of Teachers to Instruct A measuring stick for determining the ability of teachers to instruct is to be found in the educational tests which may be given trainingschool pupils at the beginning and close of the school term. If pupils of normal mentality made rapid progress, their instructor's teaching skill will be ranked high, "superior," possibly. The term would then carry an objective meaning, and the teacher's employer would know for what he was contracting.

An objective measure of professional attitude s possible. Membership and participation in professional clubs and educational fraternities would be one unit of measure. Active membership in education associations would be another. The extent of a teacher's professional reading marks certain degrees of professional alertness.

(Concluded on Page 136)

Stores Control

Arthur J. Peel, Brookline, Mass.

In October, 1926, the Journal carried an article descriptive of some of the business practices in the Newton, Massachusetts, school department. In this article the matter of adequate control of equipment and supplies, was introduced in a way that has provoked several inquiries from interested readers. As the subject is one that cannot be adequately dealt with by correspondence, it has seemed advisable to discuss it in this paper.

Like many other phases of public-school management, the problem of handling and controlling supplies and material, is one that has received a great deal of attention in recent years, and staunch advocates will be found for practices that are diametrically opposed. For example; in a letter just received from the secretary of a school board in an important center in Pennsylvania, we are told that there is a strong tendency to break away from centralized control of school stores in favor of direct shipments to school units. On the other hand, the business manager of the Newton schools is convinced of the need for centralized physical control of all school supplies, material, and equipment where such control seems necessary.

Central Control vs. Direct Shipment

There are two aspects of this subject which ought to be mentioned at this time, because they are not always clearly understood: The shipment of supplies and material to a central distributive point, and the shipment of supplies direct to the school or unit at which they will be consumed, is one thing: the control of such supplies, whether at a central store, or at schools, is another thing. Some time ago, while investigating the purchasing-and-stores system of an important school system in the south, I discovered that while all supplies and material were shipped by the vendors to one central distributing point, from which redistribution was made to school units, as required, the method of control was so loose, that at the end of the fiscal year there existed a serious discrepancy between the book inventory and the physical inventories taken in the various buildings in which substores were supposed to exist. Here was the anomaly: the principle of a central store from which shipments were made to schools and substores on authorized requisitions, had been adopted in order to more effectively control the consumption of school supplies. It was more expensive than direct shipments would have been-reshipping goods usually is, of course; the school department is burdening itself with a responsibility and expense which the dealers usually carry without additional expense to the customer. The only justification for this additional expense would be an economy—expressed in dollars and cents—effected by means of centralized control of purchasing and consumption, which would more than offset the additional expense incurred by reshipping, rehandling, and packing. What was the trouble? In this instance it was a very poor and inadequate system of requisitioning and recording; but I know of similar cases where the system has broken down by its own weight. A too-complicated system of stores control is as bad as a lack of system.

In another school department recently investigated, the superintendent is a very strong advocate of direct shipments and decentralized control. Notwithstanding all the good arguments that may be arrayed against this method, including the dangerous policy of scattered responsibility and control, very definite economies have been effected within recent years, and each school operates on a material-and-supplies budget carefully worked out on the basis of the previous year's consumption. Any efficiency expert who would recommend a central-stores system for the school department of this town, and guarantee a further saving in the cost of supplies and material, would be taking a big chance, and would, in all probability, fail to make a showing after one year's operation.

From the cases quoted, and similar cases known to many school executives, it will be appreciated that arbitrary conclusions and dogmatism should be avoided in any discussion of this subject. It will be perfectly evident that a small school department is seldom justified in maintaining a central store and thus adding to administrative expense. On the other hand, direct shipments to many schools and units is a practice fraught with concealed dangers, which may cost the taxpayers thousands of dollars a year.

The Three Plans

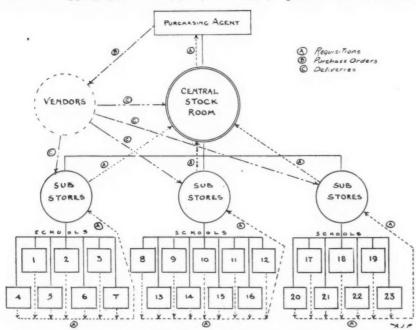
For the purpose of facilitating our discussion, I have prepared three rough charts which broadly outline the organization and routine of three of the more common systems of stores control in town- and city-school management. The first of these illustrates the kind of organization that is well adapted to large departments. We have here, not only a central store or stockroom, but three (or more) substores situated at strategic points. One of these is almost bound to be

one of the high schools. It will be noted that shipments are made, not only from the central store, but direct by the dealers to the substores, This increases the clerical work in the substores, but reduces the work in the central store. Requisitions for supplies and material are made by schools in each group, to the substores serving that neighborhood. If each school is operated on a supplies budget, there is no necessity for each individual requisition to be authorized in the superintendent's office, unless it is for something unusual. The substores, in their turn, requisition on the central store, when they do not carry the supplies or material required by any requisitioning officer. The central store, issues, for the approval of the purchasing agent (or, whoever acts in that capacity), a purchase requisition for such material that is requisitioned, but which is not carried in stock.

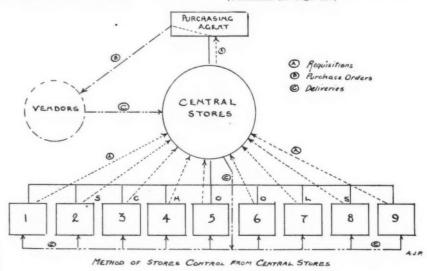
It may be worth while pointing out here, that the central stores need not always be a physical stores. In one city "central store" is merely an account in the books-a theoretical store, if you wish. It is a centralized stores record maintained in the business manager's office. The actual physical stores are distributed in different parts of the city. These substores turn in daily, all filled requisitions, and all receiving slips covering supplies and material taken into stock. With this record, and the copies of the purchase orders which are issued in the business manager's office, the central office is in a position to maintain a complete record of everything coming in or going out of the various stores or stockrooms. This is checked by a physical inventory taken at six-months periods. This is real control. Any abnormal demands are immediately detected in the business manager's office, because his stock records are entered up daily. Of course it will be recognized, also, that proper standardization and large-quantity purchasing, are greatly facilitated where such scientific control exists.

The Single Central Stockroom

In the next chart we see how one central store operates. This, perhaps, is the simplest of all store systems, and for a district or city of average size, the most satisfactory. Supplies and material which are used exclusively in one school or department—as for example, tools and materials for woodworking classes, supplies and material for domestic-arts classes—may be delivered direct to the school where they will be used, by the dealer; but proper control must then be maintained in the school or department, of such supplies. Textbooks, stationary, writing materials and supplies, and all supplies common (Continued on Page 136)



METHOD OF STORES CONTROL FROM CENTRAL AND SUB-STORES



LEFT—STORES CONTROL IN A LARGE CITY WHERE SUB-STORES ARE MAINTAINED.

ABOVE—STORES CONTROL IN A LARGE OR SMALL CITY WHERE A CENTRAL WAREHOUSE FOR SUPPLIES IS MAINTAINED.

Irregular Attendance - Its Effect and Reduction

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The wide-spread failure of local officers to enforce school-attendance laws in an effective manner may be amply proved from the writings of school administrators in all parts of the country. The proposed remedy for this impotence in local authority is to provide by law that such authority be exercised when necessary by state officials who are not rendered powerless by the local influences of politics or friendship.

The urgency of such changes in our attendance laws as will bring about this result is clearly established by a study of the effects of irregular attendance in the different states. Irregular attendance is one of the serious consequences of the failure to enforce an attendance law. In South Carolina, the average attendance for country school children was reported at 67 per cent. Writing in his annual report the state superintendent says that "this means that country people throw away each year over one third of their school taxes to educate children who stay away from school. In fact, when it is figured how much time is lost to the children who do attend regularly while the teachers are trying to help the irregulars to keep up with their classes, it will soon be seen that perhaps fifty per cent of the school taxes is wasted."1

Again he writes: "The 1922-23 annual report of the state superintendent shows that the average attendance in town and city school was 76 per cent, in country schools 67 per cent. This shows that the pupils enrolled in the public schools of the state lose from one fourth to one third of their time through irregular attendance. We have no data showing how many do not enroll at all. It will thus be seen that our taxpayers are wasting around \$4,000,000 a year trying to educate children who do not attend school regularly. The state legislature should pass an effective compulsory-attendance law, which will compel all pupils of public-school age to enroll and to attend as regularly as conditions will allow. Perhaps our greatest source of illiteracy is found in our not having such a law."2

Montana reports an enormous loss due to irregular attendance. The state superintendent writes: "Children enrolled in the elementary schools attended on the average only 119 of the 165 days school were open to them. On the average 46 days of schooltime were not attended. The loss represents 27.8 per cent of the school term . . . This enormous waste should be reduced by a stricter enforcement of our attendance laws . . . Altogether Montana wasted not far from two and one-half million dollars last year in providing for the instruction of children who were not in school."3

Kentucky reports that at least one third of the state school fund is annually wasted through nonattendance.4 New York places the waste of money due to loss in attendance for instruction alone for the state above \$13,000,000 annually.5

The commissioner of education of New Jersey states that "poor attendance, next to poor teaching, constitutes the greatest waste in public-school education in America. In dollars and cents, the state loses between one and two

million dollars a year because some children do not go to school and others attend very irregularly and infrequently, so that they are not educated."6

A county superintendent of the same state reports that the average number of days absent from the fall term was 42.7

The Tennessee report declares that irregular attendance causes enormous retardation, economic loss, and low enrollment in high school. "Only 66 per cent of the school enrollment is in actual attendance. Thirty-four per cent of the teaching period is lost by irregularity of attendance making the average school term for country children only 69 days."8

In the country schools of Tennessee, the en-

rollme	ent is as follows:	
Grade	1	142,404
Grade	2	67,272
Grade	3	59,542
Grade	4	55,748
Grade	5	46,978
Grade	6	34,768
Grade	7	25,238
Grade	8	19,114
Grade	9	7,763 (1st yr. of H. S.)
Grade	10	4,431
Grade	11	2,745
Grade	12	1,643

The tremendous loss between the first and second grades and the decrease in other grades. especially between the elementary and the high school, which results in disastrous retardation, is due largely to the brevity of the term and irregularity of attendance. There is an economic loss of \$2,418,432 of the \$8,160,809 annually expended on all public school in Tennessee according to the estimate of the United States Bureau of Education. Only 5 per cent of the school enrollment in Tennessee is in the high schools. The average for the whole United States is 9.3 per cent, only six states falling below Tennessee in this respect.9

The Enormous Waste

Irregular attendance caused a waste of practically one fourth of the money spent for schools in Texas. In the rural districts the absence for the year based on enrollment was 27 per cent, and in the cities and towns it was 23 per cent. The cost of supporting the schools for the year was \$40,000,000. The loss amounted to fully \$10,000,000.10

The waste in mere material things, according to the Vermont state report, is prodigious, and

**GAnnual Report of Commissioner of Education of New Jersey, 1920, p. 24.
**Ibid. p. 69,
**Bulletin on the Educational Situation in Tennessee, October, 1920, p. 3,
**Ibid. p. 4.
**OBiennial Report, State Department of Education, 1922-1924, p. 31.



there is a great moral waste in the disheartenment and discouragement of the teacher and school authorities.11

Wisconsin also found a problem in the loss due to irregular attendance: "The success of our schools is largely dependent upon our ability to enroll all pupils of school age, to have them attend regularly and to provide and present work that will insure normal progress on the part of each pupil. No matter what is expended on teachers' salaries and buildings and equipment, the prime requisite for effective schoolwork is that a child shall be constantly present at school to receive the instruction

The average daily attendance for the past year in rural schools has been 72 per cent, state graded schools 80 per cent, grades below high school under the jurisdiction of the county superintendent 82 per cent, high schools not in cities 88 per cent, city grades 82 per cent, and city high schools 86 per cent. The average daily attendance of pupils in all schools under the jurisdiction of the county superintendent was 76 per cent. The per cent of attendance in public schools throughout the state was 79 . . . Reports of attendance and records of expenditure for teachers' salaries show that almost \$2,000,000 was expended for the teaching of children who were absent from schools supervised by the county superintendent. Over \$1,000,000 of this sum should be charged against rural schools. Such waste should be greatly re-

The Arkansas survey reported an enormous economic and educational waste from poor attendance. The per cent of attendance in urban and village schools was entirely too low. The average was about 75 in colored schools, and less than 85 in the white schools. One remedy proposed was the enforcement of the compulsory school law.13

A test of the effectiveness of a school system is to a large extent the degree to which it is utilized by the public. This is stated in the Alabama survey: "If the people of the state fail to make full use of the schools established for their children, as indicated by a low rate of enrollment and irregular attendance, it is reasonable to assume that the schools have failed to attract and hold the children and their parents, because they have failed to provide the type of education required by that particular community . . . On this basis, it will appear that the State of Alabama ranks low in sustained school interest; and considering the small number of children making daily use of them, the schools cost the state high."14

What the loss in attendance is when no compulsory-attendance laws are established is seen in the Birmingham, Alabama, report. "In the absence of compulsory-attendance laws, it is not to be expected that in the matter of enrollment and average daily attendance the record of our schools should compare favorably with that of cities of the same class in which school attendandce is not left to the volition of pupils and parents . . . In the white schools, about 12.5 per cent and in the negro schools nearly 20 per cent attended less than fifty per cent of the time the schools were open . . . In all the white schools, the average daily attendance, based upon the enrollment was 73 per cent, and in the negro schools 64 per cent.

¹Fifty-fifth Annual Report of the State Superintendent of Education of South Carolina, 1923, p. 20.
²Fifty-sixth Annual Report of the State Superintendent of Education of South Carolina, 1924, p. 13.
³Sixteenth Biennial Report of the Superintendent of Public Instruction of Montana, 1920, pp. 25 and 26.
⁴Kentucky School Report for the Two Years Ending June 30, 1923, p. 9.

ne 30, 1923, p. 9. Annual Report of the Department of Education, 1923,

¹¹ Bulletin No. 1, 1925, State Board of Education,

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Under a system of voluntary attendance, these figures may be considered as quite favorable. They are certainly far better than the average in the state."15

Irregular attendance affects the rate of promotion. In the Baltimore survey, it was found that in 1920 there were 1,937 children who failed of promotion because of irregular attendance. "Many of these children could have been saved the repetition of a year's time in school by the more efficient enforcement of the compulsory-attendance laws. This cause of failure is one of the most easily regulated of all the causes."16

Cooper found that as attendance increases or decreases, promotion increases or decreases. The attendance difference between pupils promoted and those not promoted was about 50 days for 1917-18 and 1922-23, and 40 days for 1921-22. The promotion percentages for three different groups vary from 90.2 per cent for pupils attending 150 days or more, to 72.2 per cent for pupils attending 100 to 149 days, to 28.6 per cent for pupils attending less than 100 days.17

Reavis reports that a pupil's progress in a rural school seems to be a function of his attendance. "His standing in the class with which he recites has a definite and fixed relation to the number of days he is present."18

Gain in Attendance Due to Compulsory Law

That the compulsory-attendance law increases the degree of attendance is the testimony of some reports. In Ohio, the high-school enrollment was 175,000 and constituted 16.5 per cent of Ohio's total school population. "A decade ago the high-school enrollment was only 10 per cent of the state's population. Considerable credit for the increase of this year over the year previous, which amounts to about 24,000, is due to the new compulsory-attendance law which extended the upper limits to 18 years."19

The Oklahoma report states that an increase in the percentage of the enumeration enrolled and a large increase in the regularity of attendance was due to the compulsory-attendance law. But the law left much to be desired. There was no valid reason why only 55 out of every 100 scholastics in the state should attend school regularly.20

An enormous increase is reported in North Carolina: "The total enrollment for 1919-20 was 691,249, an increase of 99,762 over the year before. This also in face of a decrease in school population in rural districts. The increase in attendance was due in large measure to the compulsory-attendance law. So thoroughly was the work done last year by the attendance officers and teachers that practically the entire school population within the compulsory school age (8 to 13 inclusive) was enrolled in school."21

The Virginia report states that a law was passed in 1921 which made more rigid the compulsory school law and provided for the employment of attendance officers to aid in the enforcement of the law. The attendance of the state had shown a marked increase.22

In one Pennsylvania county, the percentage of attendance was increased from 87 in 1902 to 90 in 1916. The increase in the attendance was attributed to the compulsory law and its enforcement, and to better incentives offered in the schools. It was asserted that if the compulsory law were rigidly enforced in every school district, there would be an increase in the per cent of attendance of two points more. In 1902, Pennsylvania had no compulsory law and only those attended who had been raised to see the need of schools and schooling or whose parents were willing to send their children to school at a sacrifice.23

A recent Florida report mentions the effect of the passage of a state-wide compulsory-attendance law. It increased attendance 27 per cent; and enrollment 12 per cent.24 In Kentucky, similar large increases followed the passage of an attendance law. In 1919-20, in cities the year before the law became operative, the attendance was 58 per cent. In 1920-21, with the law operative, it was 62 per cent. Attendance in rural schools in 1919-20 was 55 per cent; in 1920-21, 65 per cent. "Ten per cent more of the rural children attended school in 1920-21 than in 1919-20. This means that 65,000 Kentucky boys and girls were given an opportunity for an education that otherwise would not have received it.25

"Attendance in rural schools in the past four years has increased from 37 per cent to 65 per cent. Attendance in the city schools during the same period has increased from 51 per cent to 76 per cent."26

One of the factors that explained increased attendance in Maryland was the compulsory law. In three years, the growth in Maryland's school population was over 26,500. Of these, nearly 16,000 were in the counties. The county white high schools in 1923 cared for 5,000 more children than in 1920; the county white elementary schools taught 7,650 more pupils; the county colored schools took care of 3,300 additional. This growth was attributed to the fact that children were staying in school longer than formerly, that the compulsory-attendance law was being more strictly enforced, and that the population was increasing.27

Good Results from Enforcement

A county superintendent in Missouri gives concrete evidence of the results of enforcing the attendance law. He used the figures on attendance for three years, 1916 to 1919, with no attendance officer, and 1919 to 1922, with an officer. The gain in enumeration of children of school age was 198 or 2.7 per cent. The gain in total days' attendance was 145,924 or 23 per cent. The average annual amount of increased state apportionment due to increase in total

days' attendance was \$3,718.14. The average annual cost of maintaining a county attendance officer was \$819.33; the net profit to the county from the work of the officer was \$2,898.81. During the three years, 1919 to 1922, the officer served notice to put children in school on 1,167 parents for the nonattendance of 3,142 children. In most of these cases, the notices were sufficient. However, 97 prosecutions were undertaken in court and 89 resulted in convictions and fines. Jail sentences of 10 days were imposed and inforced in 2 cases.²⁸

The Tennessee report states that enforcement of the compulsory-attendance law resulted in an increase in one year of 8 per cent in average daily attendance. In numbers, the increase was 40,625,29

West Virginia reports an increased enrollment in one year of 46,000 under a new attendance law.30 The daily attendance was increased 11 per cent, being brought up from 46 to 57. The increase was due, it was asserted, not to better teaching or better sentiment or better buildings to any great extent. "The law, poorly enforced as it has been, has increased attendance very much. It can increase it much more when there can be found in every district a few men who would as willingly be useful as popular and a justice of the peace with some regard for his oath of office."31

"The average daily attendance based on the enumeration has increased from 51 per cent in 1919-1920 to 64 per cent in 1921-1922. And the average daily attendance based on the enrollment has increased from 76 per cent in 1919-1920 to 82 per cent in 1921-1922."32

In Wisconsin, an increase in the number of eighth-grade graduates is attributed in part to the compulsory attendance law. "According to the statistics given in the biennial report for 1914-1916, 49 out of every 100 pupils finished the eighth grade. In 1918-19-20, a marked improvement was noted, while in the recent biennium 60 out of every 100 is a conservative estimate. The increase indicates on upward trend in the holding power of the elementary school in Wisconsin. We may attribute this, in part, to an awakened interest in education by parents; to the enforcement of the compulsory-education law, and to some changes gradually taking place in our school organization, which more adequately meet the needs of children."33

Conclusions

1. Irregular attendance as reported in many states is the cause of enormous losses in the product of the schools. On account of this condition school funds are wasted, school property and equipment are not used to capacity, teachers grow discouraged, children become retarded and failures, the rate of promotion is lowered, and the number persisting in school through the upper grades is greatly reduced.

2. Where attendance laws have been newly passed, or where the limits in old laws have been extended to include additional groups of children, remarkable increases in attendance are recorded. This is due to the mere effect of the law, and even when feeble efforts at enforcement are put forth.

3. In states where the legislatures pass strong attendance laws that provide satisfactory limits of attendance and that safeguard all the factors for their effective enforcement, marked improvements in both enrollment and attendance are reported.

²³Report of Superintendent of Public Instruction, 1917, p. 25.

²⁷Report of State Board of Education for Year Ending July 31, 1923.



³⁰ Biennial Report of State Superintendent of Schools,

 $^{^{24}} Florida$ Report for the Two Years Ending June 30, 1920, p. 32. ²⁵Kentucky Report for the Two Years Ending December 31, 1919, p. 14.

²⁶Kentucky Report for the Two Years Ending June

³¹ Ibid. p. 29.

³² Biennial Report, 1922, p. 2.

²⁸Biennial Report, 1920-1922, p. 34. ²⁸Report of the Public Schools of the State of Mis-ouri, School Year Ending June 30, 1922, p. 52. ²⁹Annual Report of State Superintendent of Public Instr. ction, 1922, p. 19.

¹⁵City-School Report, Birmingham, Alabama, 1914, p. 40.

16Report of the Survey of the Public-School System of Baltimore. Md., 1920-21, Vol. II, p. 177.

17Cooper. The One-Teacher School in Delaware, p.

¹⁸ Reavis. Factors Controlling School Attendance, 1920, p. 17.

19 Ohlo School Report, 1922, p. 3.

20 Blennial Report of the State Superintendent of Public Instruction, 1918, p. 10.

21 Blennial Report of the Superintendent of Public Instruction, 1918-1920, p. 10.

22 Seventh Blennial Report of the State Superintendent of Public Instruction, 1912-1924, p. 23.

Objectives of Supervision by the Principal

Clarence R. Stone, Berkeley, Calif.

Comprehensiveness and importance of supervision. Supervision of instruction is sometimes termed active supervision or classroom supervision. But supervision of instruction is much more comprehensive than such terms imply. It can easily be shown that certain activities, sometimes classified as administration, have a very close relationship to the improvement of instruction. For instance, the improvement of instruction in reading may depend to a considerable degree upon the development of plans for special classification of the pupils within the room or within a unit of two or more rooms. Getting teachers to feel the need for such plans and helping them solve the problems involved certainly belong to supervision. Likewise, one of the most effective means of helping the teacher to improve her instruction in reading may be the providing of varied types of materials according to different functions and providing different levels of material as to difficulty to suit the different levels of comprehension of the groups of pupils. To determine the material needed will take time and energy on the part of both the teacher and the principal. May not such time be legitimately assigned to supervision? Supervision should be defined in comprehensive terms. Supervision is generally recognized as the most important function of the principal, and it can only be performed on the highest level of efficiency by a recognition of its possibilities, its many relationships, the many different means that may be utilized for the improvement of instruction, the objectives, and the necessity for considerable amounts of systematic classroom visitation.

Ayer's point of view. Professor Fred C. Ayer presents a point of view that differs somewhat from the statements of most experts in educational theory and practice. He says: "Theoretically, supervision is considered more important than administration, but the facts are that administrative duties get the first call on the required duties of principals; certainly they do from the amount of time required. Judging from the available evidence I should say that a principal who can arrange to give 50 per cent of his school time to administration, 35 per cent to supervision, and 15 per cent to clerical duties will make an effective distribution of his time from the point of view of the objectives of education. . . . It seems to me positively essential that a principal should devote a considerable part of his time to the improvement of instruction within his building, but with the better prepared teachers who are now being trained and elected, and with the services of special supervision that are now usually at the call of the principal, I am convinced that the future professional career of the elementary school principal lies more in scientific management than it does in classroom supervision."

After reviewing studies that show that supervisors as a rule spend only 15.3 in the visitation of schools, Ayers concludes as follows: "What has actually happened, however, is not that principals and supervisors are neglecting classroom supervision, but that the whole school program, including better scheduling, better classification, better courses of study, better handling of supplies, better discipline, better texts, better projects, and better devices—the whole program, to repeat, has become so highly articulated and so highly cooperative that the daily administrative and routine services of principals and supervisors are in large part actual instruments in the improvement of instruction."

However, W. W. Charters says, "The principal's main chance lies in training on the job. Training on the job means analyzing mistakes and correcting them. A teacher is trained on the job by a principal when the principal observes her, commends her good practices, analyzes her mistakes, and shows her how to correct them."

Objective as to time expenditure. Assuming that the status of the principal is one of real professional leadership with adequate office assistance, it is the opinion of the writer, as a result of a long experience as an elementary principal in a large-city system and as a result of a careful study of the various investigations of the actual expenditure of the principal's time, that the principal should set as his objective the expenditure, on the average, of approximately 40 per cent of a seven-hour day in duties related to management, control, organization, and administration of his school, 40 per cent to supervisory activities directly related to the improvement of instruction, and 20 per cent to all other duties. On the average he should plan to spend at least two hours a day in classroom visitation and an additional hour in preliminary planning and follow-up activities in order to make the classroom visits eventuate to the best advantage in teacher improvement.

Objectives of supervision by the principal. Supervision is generally defined as the improvement of instruction. The more nearly ideal the learning situation is the more effective the instruction is likely to be. With this comprehensive view of supervision in mind, the various objectives of supervision by the principal may be discussed under seven general heads:

I. Correlation, coordination, and integration of the work of teachers and supervisors. In order effectively to realize this objective the principal must be the real educational director of his school. He must be familiar with the work in all grades and in all subjects and activities. Herein lies an opportunity to effect large economy in instruction.

II. Adaptation of the course of study to local needs and provision for needed supplements. The new instruments for mental and educational measurement and sociological surveys have shown that the abilities, accomplishments, and needs of the pupils of the same grade in different schools in the same system are so different in many cases that to attempt to follow exactly the same course of study and use the same instruments of instruction would be a serious mistake. The importance of having flexible courses of study is now generally recognized by leaders in education. The principal is responsible for the collection and organization of facts concerning the abilities, interests, at-

tainments, special handicaps, and needs of the pupils of his school and for the adaptation and supplementation of the official courses of study necessary to make it adjusted to his school.

III. Improvement of the materials and instruments of instruction. In some school systems there is a very high degree of uniformity with reference to books and other instruments of instruction, so that the principal has little opportunity to improve instruction through the improvement of materials and instruments of instruction. In other school systems the principal is practically free to determine these matters within the limits of a budget allowance. Probably the best plan is some kind of a middle course that will provide a large amount of helpful guidance and considerable limitation and at the same time enable the principal to provide books and other instruments of instruction of such a character and in such quantities as are needed to carry out his plans of organization and supervision. Herein lies a large opportunity and responsibility on the part of the principal for the improvement of instruction.

IV. Improvement of classroom organization and pupil placement. The newer conceptions of education indicate that classroom organization and proper placement of pupils is vitally related to the improvement of the learning situation and consequently to the improvement of instruction. Mass instruction is gradually giving way to group activities and individual instruction as means of meeting the problem of individual differences. After the principal has his school organized he must continually be considering the needs and possibilities of adjustments as means of improving instruction. The utilization of desirable procedures may depend upon special plans of classroom organization. For instance, in the three-group plan of reading instruction in use in the middle grades in Detroit and San Francisco, the classroom organization, the activities and procedures, and the materials are inseparably interrelated.

V. Location and strengthening of weak spots in the total instructional program. An important supervisory objective for every principal is the location and strengthening of weak spots in the work of the school as a whole through a continuous supervisory survey and the inauguration of cooperative supervisory projects for strengthening these weak places. The weakness may be in a particular subject or phase of the schoolwork or it may lie in a particular teacher. While teacher placement, to utilize to best advantage the particular adaptations of teachers, is primarily an administrative problem, it is intimately related to supervisory problems. In studying the school to determine lines of improvement needed, all factors effecting results must be taken into consideration, and all possible lines of improvement must be considered. It is just here that there is no clear dividing line between organization and administration on the one hand and supervision on the other.

VI. Development of a good school spirit. The value of a good school spirit as a means of improving the learning situation is generally recognized. If teachers and pupils are happy in their work and if they think of their school with pride, loyalty, and affection, the problem of control and instruction is made easier. In all of the supervisory and administrative activities of the principal he should keep in mind the development of a healthy school spirit as a means of improving instruction. At times it will be advisable to devote special energy and time to



this particular objective. Occasional short visits to rooms for making a remark or taking some action in this relationship may be effective supervision.

VII. Improvement of instruction through teacher growth. Herein lies probably the most important objective, the most fundamental and far-reaching phase of the principal's work as a supervisor. The specific objectives in this relationship are as follows:

1. To broaden her view of education.

2. To help her understand the functions of her various activities or subjects and to know what are reasonable standards of attainment for particular groups and individuals.

3. To aid her in knowing and applying the laws of learning, the laws of habit formation, and generally accepted principles of method in classroom control and instruction.

4. To assist her in learning and using skill-fully the most effective technics known for accomplishing a particular desirable end.

5. To develop her ability to create learning situations in which there is a maximum of purposing on the part of pupils, to stimulate and direct worthy purposes, and to provide high motives for improvement on the part of pupils.

To develop her skill in guiding pupils in their planning and carrying to successful conclusion purposeful activities.

7. To develop her ability to study and judge

the interests, needs, capacities, and limitations of the pupils, and to interpret and utilize available test data in this connection.

8. To aid her in interpreting the official eourse of study, in applying its directions and suggestions in the way best adapted to her teaching situations and problems, and to supplement it as conditions require and justify.

 To develop her ability to select and use to best advantage appropriate experiences, subject matter, and instruments of instruction.

10. To develop her ability to locate learning difficulties and teaching problems, to make class and individual diagnosis, and to provide appropriate corrective instruction.

11. To develop her initiative and resourcefulness and her ability to make a self-analysis for purposes of improvement.

12. To develop her ability to do teamwork that aids in coordinating the work of the school and that results in a good school morale.

13. To develop personal qualities that aid in the art of control and instruction; such as, tact, sense of humor, perseverance, sense of justice, patience, and enthusiasm.

14. To aid her in securing and maintaining good health, proper use of the voice, and appropriate general appearance.

To develop a high standard of professional ethics.

The Rating of Teachers J. G. Moore, Superintendent of Schools, Fargo, N. Dak.

We are agreed, I am sure, that every school system should have some kind of reliable method of determining the professional contributions which each teacher is making. As administrators of public funds, we are accountable to the public for the proper expenditure of its monies. From a purely business standpoint, this obligation is unescapable. But a far greater responsibility rests upon the school executive. Upon his shoulders lies the primary burden of maintaining the standards of training for the school children of the community. The successful discharge of this duty is determined by the personnel of the teaching staff. If the members of the teaching staff are selected and retained on the basis of merit, and by means of a sound administrative procedure, the general standards of the schools will be stable and steady progress will be assured. This involves some form of estimating teacher worth, either as an unwritten practice, or as a more definite procedure reduced

Objectives in Teacher-Rating Plans

Any plan of rating teachers should have in mind certain definite objectives. For convenience I may classify these under five heads:

1. To set standards of judging. Judgments are valuable only in the measure that they approximate to approved standards. They must be of general applicability and must command the confidence of the teachers and the school board. Dogmatism or arbitrary decisions cannot achieve lasting results. The standards must be carefully worked out through investigation of successful plans operating in other school systems and the best features of these plans adapted to the local situation.

2. To determine the status of the teacher on the basis of the local school standards. Simple justice to the teacher demands that she be judged on the basis of her contract. If she is inexperienced and working for one thousand dollars, it is not fair to expect that she can do the amount or quality of work done by the teacher of ten years' experience who is receiving eighteen hundred dollars in the same school system. True, the general standards of judging must be absolute, but the follow-up of the plan must be sufficiently flexible to insure equitable

consideration for the status of the individual teacher.

3. To point out strengths and weaknesses. A chief value of a rating plan lies in its usability to go directly to the strengths and weaknesses of the individual teacher and to set these forth clearly on a professional basis.

4. To lay the basis for improvement in service. Every school executive desires to retain, not only the good teachers, but also those teachers who give promise of growth in service. A large annual turnover in the staff is just as serious a handicap to the achievement of high standards in school work as it is in business and industry. I doubt whether any teacher can do her best work before her third year in a community, and even under the best conditions her finest service will probably not come until many years later. As school executives we should keep one eye constantly on the future, and a part of our planning should aim at improvement in service.

5. To establish grounds for continuance or severance of school relations. A rating plan will necessarily be used, in part, as a purely business measure. When the time of annual election comes around, it should be a definite factor in determining the continuance or severance of school relations. To most teachers this is a time of honored recognition; to others it is the hour of tragedy. The school board is under obligation to maintain the integrity of the schools above all other considerations, and a good rating plan should enable them to act equitably and decisively.

Characteristics of Successful Rating Plan All good rating plans have certain characteristics in common. The most important of

these may be classified as follows:

1. Comprehensiveness. By this term I mean, not the encyclopedic enumeration of details sometimes proposed by research workers, but rather a balanced general perspective of the essential working qualifications of a good teacher—such as personality, training, management, and method.

2. Workability. A good rating plan must be actually usable under the conditions prevailing in the local schools. A plan that works well in one school system may not succeed in another.

No administrative device can take the place of a practical working knowledge of local limitations. In general, simplicity of plan is most conducive to clearness of understanding and certainty of action.

3. Definiteness. Unless a rating plan conveys definite ideas of worth, or lack of worth, to teachers and to the school board it is worse than useless. This means that it must be so clearly thought out beforehand by the superintendent or principal that he unhesitatingly stakes his professional reputation on the decisions recorded by him on the rating blank. The organization of information on the blank, in justice to the teacher and to the school board, should be specific and of material consequence. If, in any case, the rating cannot be frankly definite—whatever the reason—it is better to take a second thought before going on written record.

4. Proper evaluations. The chief danger in using a large number of items on a rating blank is the difficulty in conveying to others the proper relative worths of the several items. There is a fairly common tendency on the part of school-board members to add up the several excellents, goods, fairs, or poors, and to strike a mathematical balance. The results of such a method are sometimes far from a true estimate of the teacher's working efficiency, for some points are of much more consequence than others. A good rating blank must guard against distortion of the teacher's general status in the schools.

5. Fearless impartiality. Unless those who would rate teachers are in a position to act impartially and fearlessly, better that the blanks be left severely alone. Every community has its own peculiar problems in this respect, and it is impossible to lay down plans of general acceptability. Your own good judgment must be the guide for your own schools.

Application of Plan in Fargo In the Fargo schools we have used the rating system for many years. Formerly we used a comprehensive academic form listing some 33 items under the heads: Personal Equipment; Professional Equipment; School Management; and Technic. We found, however, that a large number of items was conducive to distorted conclusions-at least, to improper general evaluations. We are now using a much simpler blank containing only 11 items, as follows: Teaching Personality; Health; Loyalty and Cooperation; Classroom Management; Interest in Pupils; Teaching Results; Extracurricular Activities; General Influence in the School; and General Comments. Principals are required only to answer the last two questions: Do you desire to have this teacher returned to your school next year? Do you recommend a transfer to another school in the city—and, if so, why?

From a general administrative viewpoint, the actual worth-or desirability-of a teacherrating system depends upon the conditions which dominate the local situation. If the superintendent and his assistants are not given a reasonable working initiative in the nomination of teachers, or if tenure and salary promotions are intrenched regardless of merit, a rating system would probably prove a dangerous plaything. In many school systems it can, however, become a valuable administrative instrument when worked out with care and used with tact and courage. But before adopting somebody else's plan of rating teachers, the superintendent or principal should make a survey of his own school conditions, of the traditions governing his community, and of the results he may reasonably hope to achieve in the local situation. By all means, he should investigate rating plans that are, or are not, working out well in other schools, and find out the reasons for the success or failure of these plans. He should then be able to attack his local problem from a practical viewpoint with an even chance of making a worth-while contribution.



AUDITORIUM, EDINBURG, TEXAS.

Giesecke & Harris, Architects, Austin, Texas,

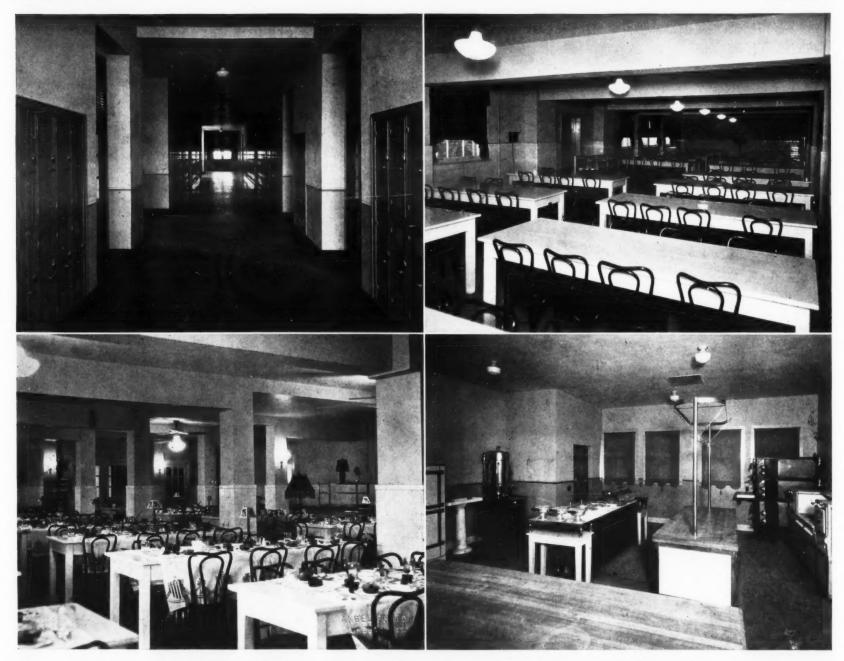


AUDITORIUM (STAGE FROM BALCONY), EDINBURG, TEXAS. Giesecke & Harris, Architects, Austin, Texas.



SENIOR HIGH SCHOOL, EDINBURG, TEXAS.

Giesecke & Harris, Architects, Austin, Texas.



TOP: SECOND FLOOR CORRIDOR AND CAFETERIA. SENIOR HIGH SCHOOL BUILDING, EDINBURG, TEXAS.

BOTTOM: CAFETERIA IN HIGH-SCHOOL RECITATION BUILDING AND KITCHEN IN TEACHERS' HOME, EDINBURG, TEXAS.

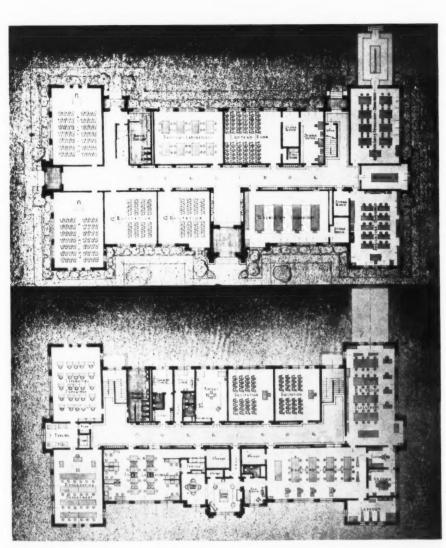
Giesecke & Harris, Architects, Austin, Texas.



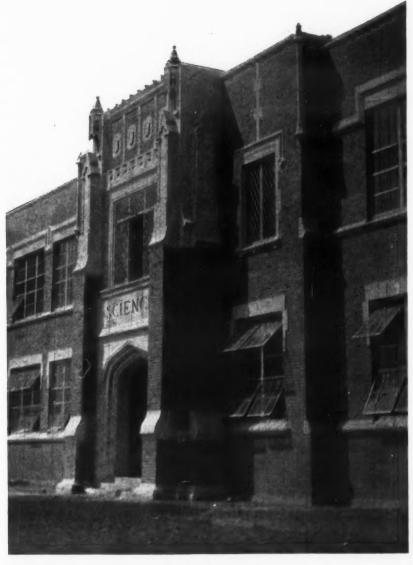
SCIENCE BUILDING, EDINBURG, TEXAS.

Giesecke & Harris, Architects, Austin, Texas.

SCIENCE BUILDING, EDINBURG, TEXAS. Giesecke & Harris, Architects, Austin, Texas.



TOP: FIRST FLOOR PLAN. BOTTOM: SECOND FLOOR PLAN.



ENTRANCE DETAIL.

SCIENCE BUILDING, EDINBURG, TEXAS.

Giesecke & Harris, Architects, Austin, Texas.

A Texas Community School Plant—The Edinburg, Texas, Consolidated Schools

The Splendid Architectural Work of Messrs. Giesecke & Harris, Austin, Texas

New communities which have greatly increased their population during the past ten or fifteen years enjoy advantages that are only appreciated when their accomplishments in the shape of schools and school plants are examined. An outstanding example of such a community, which is enjoying the benefits of a complete, modern school system housed in a modern school plant, is the city of Edinburg, in Texas, the center of a rich farming community. The city is the educational, trading, and population center of the Lower Rio Grande Magic Valley, which comprises some 650,000 acres, of which about one third is irrigated farm land, and two thirds is dry-farming land. The city is the county seat also of Hidalgo county and is a city of 10,000 population. The entire community has grown enormously during the past fifteen years and the city itself has greatly increased its population as well as its wealth. In fact, the growth has been so rapid that the school authorities have been hard pressed to reorganize the school system in keeping with the needs and opportunities of the situation.

Coincident with the necessity of reorganizing the schools has come the problem of reconstructing the entire school plant, adding materially to the buildings in existence, and unifying the school-building program for the immediate and future needs. In the entire work, the school authorities and the architects selected by the board of education, have cooperated closely, and the illustrations in the accompanying pages show what has been accomplished up to the present time.

The Edinburg school system is organized on the five-four-four basis; that is, the elementary schools contain five grades; the middle school, or junior high school, a new building for which is now under construction, contains four grades; and the upper school, or the college as it is called locally, offers four years of work, of which the last two correspond to the two years of

junior college work. The middle school and the college are housed in a centralized plant, which occupies an ideal site, and which includes an academic building, a library and study hall (an old building), an auditorium, a science building, a middle school now under construction, an industrial-arts building, a music building (an old structure), and a central power plant. The elementary schools are housed in two buildings not located on the central site—one for white children and the other for Mexican children. The last mentioned building is necessary because of the large Mexican population which provides the common and semiskilled labor not only in the city but on the farms in the entire valley.

Space will hardly permit a discussion of the Edinburg school system, but it should be said that Supt. H. C. Baker and the school authorities are progressive and fully alive to the needs of the community and to the splendid opportunities which the enlarged population and the growing economic possibilities have made possible. The school plant here illustrated and described is the splendidly adapted tool in which the educational processes operate. The very completeness and adaptability of the plant express the forward-looking policies and program of the schools.

The Development of the School Plant

The development of the school plant has followed lines suggested by practical idealism and good economy. It has been the policy of the board of education and of the architects to provide every necessity for developing the present instruction of the children and at the same time to look forward to future needs and enlargements

The first step in the program was the enlargement of the school for Mexican children, and the addition to it of an auditorium large enough to serve as the civic center for the Mexican population. The old four-room build-

ing used by the Mexicans housed hardly onehalf of the possible enrollment and provided no facilities for the new school program. The second step was the enlargement of the primary school for white children and the addition of an assembly hall. As a third step and simultaneously with these two operations, the highschool building was remodeled externally and the interior partitions and floors were removed for the rearrangement and reconstruction of the building as a recitation building for the highschool system. An old manual-arts building which had outlived its usefulness was torn down then to make room for new buildings.

After this work had been completed so that classes might be resumed, the high-school auditorium was begun as the fourth step. The building is now completed. It seats 1200 persons and has a stage large enough to properly care for any legitimate drama or opera which may come to town.

The fifth building undertaken was the science building, erected at a cost of \$150,000, to house the various laboratories, the home-economics department, and the commercial department of the high school. The completion of this building has made possible the opening of the junior college classes.

The sixth structure in the high-school and college group is the industrial-arts building, which provides shops and classroom space for the vocational and prevocational work for boys. Two old buildings are in use for music and pupils' dormitories.

The junior school, which is the seventh unit, is to house 1,200 children and is about half completed at the present writing.

The program outside the city includes five rural-school buildings, housing centralized schools at strategic points in the valley. Each of these buildings will contain six rooms each and will have an auditorium for school and local community use.



TEACHERAGE, EDINBURG, TEXAS.

Giesecke & Harris, Architects, Austin, Texas.



INDUSTRIAL-ARTS BUILDING, EDINBURG, TEXAS.

An important part of the program, not mentioned heretofore, is the teachers' home, which resembles in finish and equipment a fine college-teachers' dormitory. This building was made absolutely necessary because of the rapid growth of the community and has proved in every way an educational and social asset for the schools.

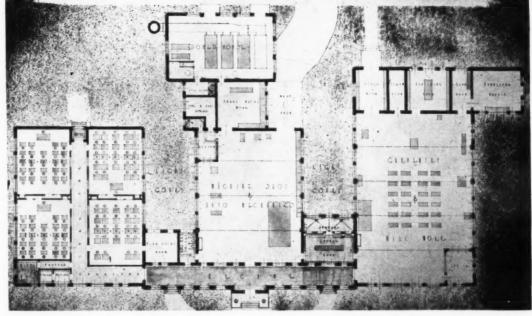
The entire school-building program as described above has involved an expenditure of approximately \$2,700,000, a large sum for so small a community, but considered an investment for the future. Details of the several buildings are given in the following paragraphs.

The Administration Building

The administration building, as mentioned above, is the former high-school building, remodeled and rearranged to suit the purposes of academic instruction and to provide the administrative and supervisory center of the entire school system. The building contains four-teen classrooms, five offices for the board of education, the superintendent of schools, the secretary of the school board, and for the several supervisory officers of the school system. It includes also restrooms, several book rooms, toilets, and a large cafeteria.

The cafeteria is perhaps more important in the Edinburg schools than it is in the average school system, due to the fact that many of the





FLOOR PLAN.
INDUSTRIAL-ARTS BUILDING, EDINBURG, TEXAS.
Giesecke & Harris, Architects, Austin, Texas.



DRAWING ROOM.



AUTO MECHANICS SHOP.



DETAIL OF ENTRANCE.
INDUSTRIAL-ARTS BUILDING, EDINBURG, TEXAS.
Giesecke & Harris, Architects, Austin, Texas.

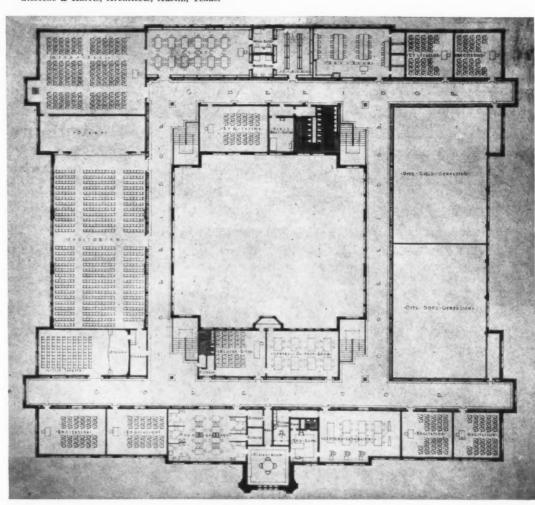
children are transported from outlying rural districts. The cafeteria has been used by local organizations for dinners and other civic gatherings. The kitchen equipment includes automatic electric refrigeration, hotel ranges, and every mechanical device that can be economically used for expediting work and improving the sanitary handling of food materials. The cafeteria proper is equipped with the best types of standard restaurant fittings, warming tables, etc., and will seat 250 pupils at one time.

The Auditorium

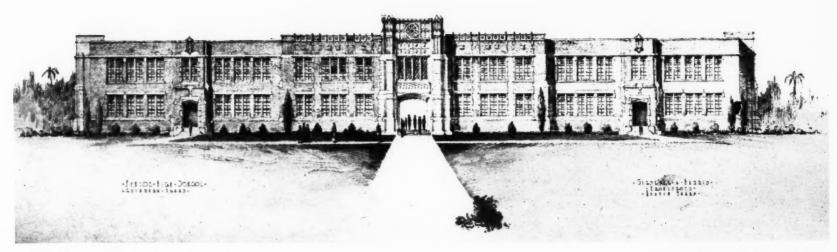
The auditorium has been planned for direct access from the street and is used not only for school assemblies, but also for various community gatherings, theatricals, etc. The room will seat 1200 people, and the stage arrangement, side and cove lighting, and equipment, is such that any theatrical or operatic performance can be accommodated. The ceiling and walls have been especially treated with celotex tile to prevent reverberations, and the acoustics have been pronounced especially satisfactory. The floors are concrete with linoleum covering in the aisles. The entire treatment of the auditorium is dignified and restful, and quite as attractive as a first-class theater.

The Industrial-Arts Building

The industrial-arts building houses all the shop departments and provides space for mechanical drawing and other branches. The building is erected in three bays, of which one is arranged for woodworking, another for metalworking, including machine-shop practice, auto mechanics, etc., and a third for classrooms. The building is so planned that each shop has complete light from two sides and ample cross ventilation in warm weather. The classrooms



SECOND FLOOR PLAN.
JUNIOR HIGH SCHOOL, EDINBURG, TEXAS.
Giesecke & Harris, Architects, Austin, Texas.



JUNIOR HIGH SCHOOL, EDINBURG, TEXAS.

are in a separate wing so that noise and dust will not disturb them. Adjoining the middle wing of this building but entirely separated from it by heavy fire walls is the power plant which at present includes three large Kewanee boilers, pumps, and other machinery, with space for an additional boiler. The power house has a reinforced concrete stack 104 feet high. The industrial-arts building is largely fireproof. The floors are of concrete, except for linoleum covering in the classrooms; the walls are brick and stone, the window sashes are steel fenestra, and the roofs are carried on steel trusses and covered with tile and other fireproof roofing. The building cost \$135,000.

The Science Building

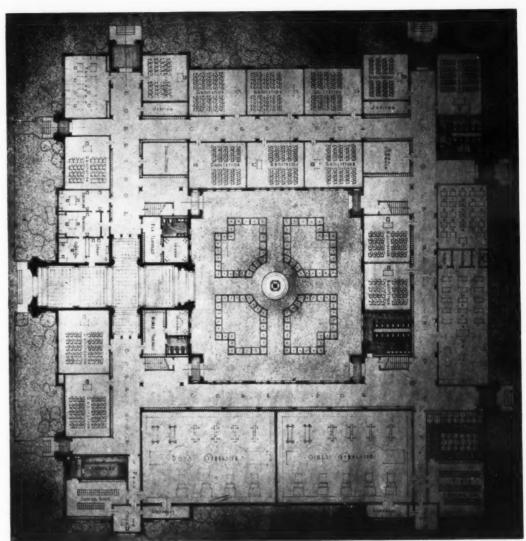
The science building is a two-story structure built of concrete and brick, trimmed with Texas limestone. The departments have been carefully grouped for efficiency in administration and instruction. Attention has been given to the possibility of future enlargement and growth of each of the departments. There are four standard classrooms, two commercial rooms, two chemistry laboratories, a biology laboratory, a physics laboratory, a conservatory, six rooms for home economics, two offices, a library, a model apartment, and restrooms and toilets. The building is equipped with steel fenestra. The classrooms have plastered walls and steel ceilings. The floors are covered with linoleum, except in the corridors, which are of composition over concrete, and the laboratories which are of the same material. The furniture in the laboratories and other rooms is of standard school make. The building cost \$150,000.

The Junior School

The junior school which is now under construction will be a two-story building to house 1,200 pupils and will be the largest structure in the group. It is planned in the shape of a huge square, with the gymnasium occupying the center.

The building will contain twenty classrooms, two commercial rooms, four laboratories, a library, a librarian's office and a workroom, a large study room, two artrooms, two rooms for special subjects, three offices, two rooms for book storage, a clinic, a girls' restroom, and two teachers' rooms. A small auditorium seating 588 persons will care for the ordinary school





FIRST FLOOR PLAN.

JUNIOR HIGH SCHOOL, EDINBURG, TEXAS.

Giesecke & Harris, Architects, Austin, Texas.

and equipped to serve for the entire group of

The building is being constructed of concrete and brick, with artificial stone trimming. The windows are of the Donovan universal type. The roof and floor construction is of the steeljoist type. The corridors have composition flooring over the concrete and the stairways have

assemblies. The gymnasium has been planned Wooster safety treads. The classrooms are plastered and have battleship linoleum finish floors. The building will cost approximately \$340,000, or \$285 per pupil.

The Stephen Austin School

The school for Mexican children is known as the Stephen Austin School and is located in the center of the Mexican population. Spanish Colonial precedents have been followed in the



AMERICAN WARD SCHOOL, EDINBURG, TEXAS.

Giesecke & Harris, Architects, Austin, Texas.



AUDITORIUM,

AMERICAN

WARD SCHOOL,

EDINBURG,

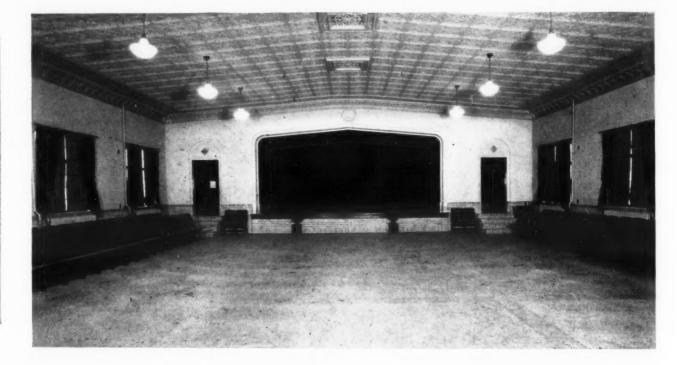
TEXAS.

Giesecke

& Harris,

Architects,
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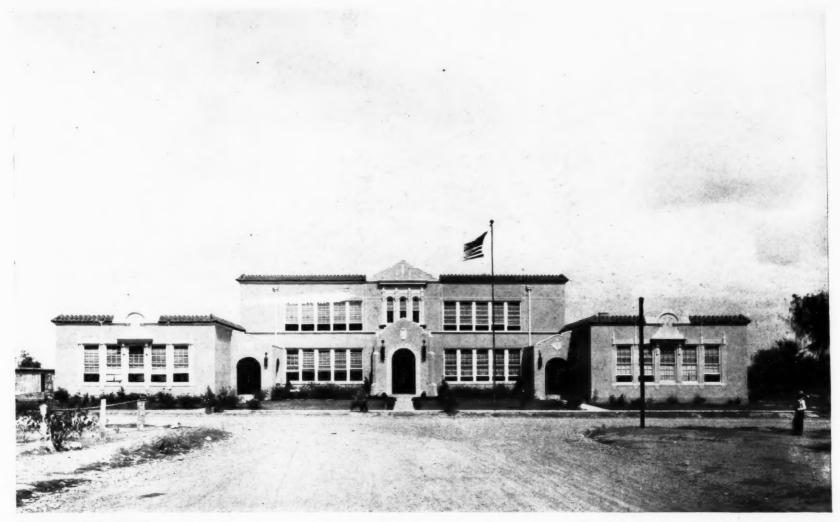
Texas





AMERICAN WARD SCHOOL, EDINBURG, TEXAS.

Giesecke & Harris, Architects, Austin, Texas,

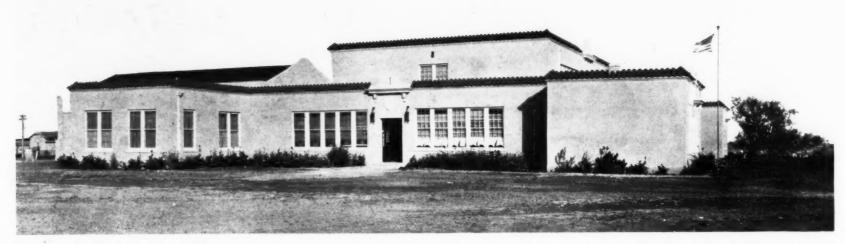


STEPHEN AUSTIN SCHOOL, EDINBURG, TEXAS.

Giesecke & Harris, Architects, Austin, Texas.



AUDITORIUM.
STEPHEN AUSTIN SCHOOL, EDINBURG, TEXAS.
Giesecke & Harris, Architects, Austin, Texas.



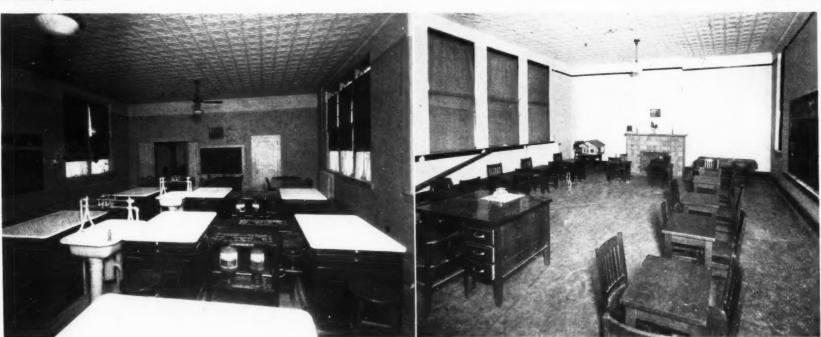
SIDE VIEW, STEPHEN AUSTIN SCHOOL, EDINBURG, TEXAS.

Giesecke & Harris, Architects, Austin, Texas.



REAR VIEW, STEPHEN AUSTIN SCHOOL, EDINBURG, TEXAS.

Giesecke & Harris, Architects, Austin, Texas.



HOME ECONOMICS FOOD LABORATORY.
STEPHEN AUSTIN SCHOOL, EDINBURG, TEXAS.
Giesecke & Harris, Architects, Austin, Texas.

exterior design; a cloistered arcade reminiscent of the old Spanish missions connects the main building with the auditorium at the rear.

The building is constructed of brick and stucco and the exterior walls are trimmed with stone and tile. The floors in the corridors and classrooms are covered with battleship linoleum; the auditorium floor is of cement, covered with lino!eum in the aisles; the floors in the toilet rooms are of Keene cement.

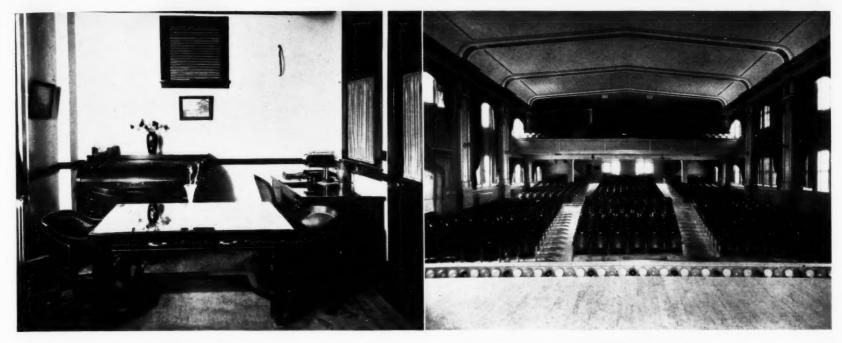
The building contains eleven classrooms, two laboratories, an auditorium, a library reading room, two book-storage rooms, offices, and rest-

Heat is supplied by a steam-heating system and the plumbing is of modern school type.

KINDERGARTEN ROOM.

The site is being beautified at the front of the building and the large space at the sides and rear is intended for play purposes. The building was occupied in March, 1927.

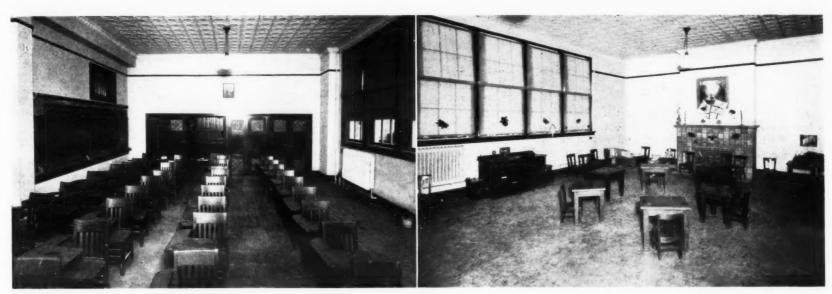
The auditorium measures 47 by 65 ft., and has a seating capacity of 475 pupils. The arrangement is suited for health activities, as well as civic gatherings, school assemblies, etc.



SUPERINTENDENT'S OFFICE.

SENICR HIGH SCHOOL, EDINBURG, TEXAS. Giesecke & Harris, Architects, Austin, Texas.

AUDITORIUM FROM STAGE.



RECITATION ROOM.

AMERICAN WARD SCHOOL, EDINBURG, TEXAS.

Giesecke & Harris, Architects, Austin, Texas,

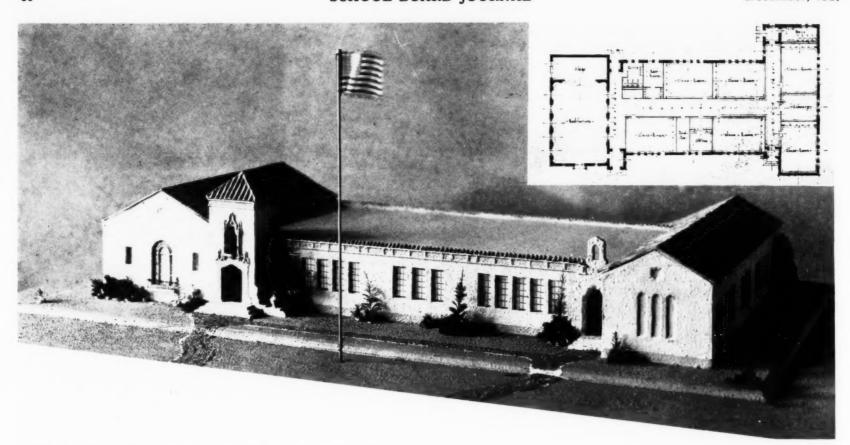
KINDERGARTEN.



GENERAL VIEW AND DETAIL OF CONCRETE FRAME.

JUNIOR HIGH SCHOOL, EDINBURG, TEXAS.

Giesecke & Harris, Architects, Austin, Texas.



MODEL OF 6-ROOM CONSOLIDATED RURAL SCHOOL AND FLOOR PLAN, EDINBURG, TEXAS.

There are two dressing rooms with lockers and complete shower baths.

The American School The school for white children is an eighteenclassroom enlargement of a ten-room gradetype.

school building and is planned and equipped much along the lines of the Austin School just described. The building provides complete accommodations for the first five grades. The main part of the building has been remodeled and in part reconstructed, and the auditoriumgymnasium has been added to it.

This building is also designed in the Spanish Colonial style. It is built of brick and stucco, with exterior walls trimmed with stone and tile. The floors in the corridors and classrooms are covered with linoleum; the auditorium has a composition floor; the toilets have floors of Keene cement.

The building contains eighteen classrooms, a library reading room, a book-storage room,

MAIN ELECTRIC PANEL BOX. AUDITORIUM, EDINBURG, TEXAS. Giesecke & Harris, Architects, Austin, Texas.

offices, and restrooms. The auditorium measures 46 by 50 ft. and seats 325 persons.

The building is heated by a steam-heating system and the plumbing is of the most modern

The Teacherage

The teacherage is a dignified building, which would do credit to any city. In comfort and convenience it is equal to any well-arranged club and in homelike appointments it far surpasses any clubhouse found in the large cities. The building houses most of the teachers in the city schools at a nominal cost for rooms and meals. It has been found to insure congenial social life that is contributing very much to the efficiency of the teaching corps.

The Rural Schools

The consolidated rural schools, of which one building has been begun, will be of the onestory type, built of brick and tile. Each will contain six classrooms, an auditorium, toilets. an office, and a library. The buildings will be carefully planned with breeze windows.

The Equipment of the Buildings The architects have shown exceptional care

and good judgment in equipping the buildings with the latest types of built-in furniture and equipment for adequate administration and instruction. The windows throughout are of the full ventilating type and other means have been adopted for cross ventilation of all rooms during the hot season. The sanitary equipment includes the best type of plumbing, chosen especially for heavy duty and long life. The electrical equipment, particularly in the auditorium, is of special design adapted to use in each department. The buildings are equipped with electric program clocks and steel lockers. The classrooms, where necessary, have wardrobes fitted with vanishing doors. The window shades are of the adjustable type.

This school plant represents in a remarkable way the results which can be obtained when the educators have a well-defined program and prepare for the board of education and the architects a complete educational specification. It represents also on the part of the architects a thorough understanding of the educational problem, coupled with experience and ability to translate the educational needs into building

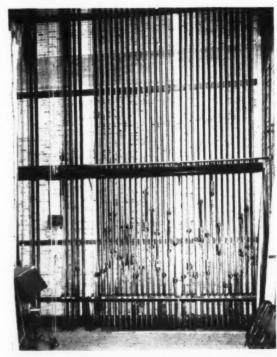
Giesecke & Harris, Architects, Austin, Texas.

plans and specifications. The results which have been obtained could not be possible except under the guidance of a single firm of architects who are following through the entire project to insure the maximum of educational service without financial extravagance.

ANNOUNCE CONVENTION DATES FOR NATIONAL ASSOCIATION SCHOOL BUSINESS OFFICIALS

The next annual meeting of the National Association of Public-School Business Officials will be held June 5 to 8, at Denver, Colo. The headquarters for the meeting will be in the Cosmopolitan Hotel.

It is announced that railroad fares will be on the tourist-rate basis, which affords a very substantial saving. Special round-trip rates from the East, without berth, are: From Boston, \$102.66; from New York, \$93.32; from Philadelphia, \$88.14; from Pittsburgh, \$68.01. Tourist tickets allow special stop-overs and return by a different route. It is expected that a special train out of Chicago will be arranged for those going to the meeting from the middle west.



SCENERY CONTROL ROPE PANEL. Giesecke & Harris, Architects, Austin, Texas. AUDITORIUM, EDINBURG, TEXAS.

A Brief Sketch of the Problem of Public-School Finance

Robert D. Baldwin, Columbia, Mo.

Even at the risk of being accused of "carrying coals to Newcastle," this paper will be introduced with the veteran assertion that publicschool finance is the most pressing problem which confronts American education at the present hour. The adjective "veteran" is used with confidence, with more confidence, in fact, than the assertion is made. For it must occur to one that there are many educational problems which are pressing sorely for solution, some so important that one is somewhat hesitant in assigning to anyone the place of greatest pressure. At the same time it occurs to me that the financial problem has been ever pressing since first we embarked upon public education as a dream, a hope, and on down through its partial, less partial, and more nearly complete realization.

Thus, at Massachusetts Bay, it was the cost of education which caused the Colonists to be so slow to carry out the law of 1642 as to make it necessary to pass an additional law in 1647, which provided a fine as penalty for failure to establish the schools required. Thus, also, just one century ago, Governor Wolcott, in a message to the Connecticut legislature, stated "if funds can be obtained to defray the expenses of the necessary preparations, I have no doubt that schools on the Lancastrian model ought, as soon as possible, to be established in several parts of this state." Fortunately for public education, these Lancastrian schools could be very reasonably financed, so that the public became willing to assume this comparatively light burden on the taxroll (the cost per child per year in New York City in 1822 was as low as \$1.22); thus was the way prepared for the further spread of taxation for education. But new needs created new demands upon the schools, and the new facilities to satisfy these involved additional expenses, and so finance kept bobbing up.

Will Costs Continue to Mount?

The following extract from an address delivered by one of the founders of the school, at the dedication of a new building at Norwich, Connecticut, in 1856, is amply indicative: "While the high school was a new thing and while a few enlightened citizens had the control of it, in numerous instances it was carried to a high state of perfection. But after a time the burden of taxation would begin to be felt. Men would discuss the high salaries paid to the accomplished teachers which such schools demand, and would ask, 'To what purpose is this waste?' Demagogues, keen-scented as wolves, would sniff the prey. 'What do we want of a high school to teach rich men's children? It is a shame to tax the poor man to pay a man \$1800 to teach the children to make x's and pothooks and gabble parley-vous.' The work would go bravely on; and on election day, amid great excitement, a new school committee would be chosen, in favor of retrenchment and popular rights. In a single day the fruit of years of labor would be destroyed." This has rather an up-to-date sound, hasn't it? So it has gone on-new needs, increased taxes, economy campaigns (socalled), eventual public conviction of the wisdom of increased expenditures for schools, and always increasing costs, higher taxes, and an increasingly evident problem of public-school finance. On the ground that history repeats itself, one might be justified in adding-and the end is

But there are some men of acknowledged position in the teaching profession who differ with this view that education will go on costing more, and who openly maintain that this increasing cost of public education must stop, or that, if it soon doesn't, it will anyway; and that because the people will simply refuse to foot the bill. Perhaps the most thoroughgoing statement of

this position is that of Dr. Henry S. Pritchett in his annual report as president of the Carnegie Foundation for the Advancement of Teaching for 1922. He devotes a large portion of his report to a discussion of the reasons for the high cost of education, and to showing how enormously it has increased, and leaves one with the general impression which is well expressed in his own words: "It is necessary that those in charge of our agencies of education should realize that, generous as is the American public, the day is here when education must reckon with economic necessity." In other words, we simply cannot afford the standard of education that we are attempting to maintain, and even to advance. And this is the thing that he has failed to prove, or even to support with facts which even the ordinary man would regard as backing up his contention. Much of what he has to say is probably valuable and pertinent criticism, much is based upon demonstrable facts of a sort, but this assertion, and the impression it is meant to convey, are purely a matter of personal opinion. And yet this is his crucial point.

Some Relative Values

Is the ability to afford a commodity to be determined by the amount we have spent upon it, or even by the larger amount we have spent upon it this year than we spent ten years ago? If the American people have doubled their savings deposits in the past five years, does this mean that they simply cannot afford to continue such action? Or is it a sign that they have begun to value savings more highly? If my income has doubled, would it not be something of a fault if I should not have saved or invested in the same proportion? Is not my income a better basis for determining what I can afford than the bare commodity itself? If I spent practically 24 per cent of my income on luxuries, am I to be held up as a spendthrift because I am so rash as to invest 2.5 per cent of my income upon education?

This is not to criticize expenditures for luxuries in the least, but I believe it does compel a thought or two as to relative values. How much education can we afford as a people? Doesn't it depend, in the last analysis upon how much we value education? I believe it was Emerson who wrote "What wilt thou have? quoth God. Take it and pay for it." That is the true spirit of our people. We can have what we want, and we can pay the bill, too. Not whether, but what we can afford is the significant question. And along with it there is another—how can we most conveniently meet the payments? These are our real problems then (1) to determine what is worth having in our educational program, and (2) to develop a financial program that will secure these things of greatest worth to all of our people. Manifestly a paper on public-school finance concerns itself only with the latter problem.

Our concern is to secure these things of greatest educational worth to all our people by a system of financing which will equalize both the burdens and the benefits of education throughout the country insofar as this is at all possible. Any such system must involve the following items: (1) a budget, which might well be thought of as a critical itemization of Problem 1 above; (2) taxing programs; (3) apportionment schemes. These will be considered later in this order. It still remains to point out the fact that our financial problem is much complicated by the facts that our ideals in education are national, that educational authority resides in the state, and finally that the support of education is practically altogether a more or less local affair. The first fact, that our educational ideals are national, or that education is with us a national ideal, will hardly be disputed. The other facts are largely a matter of law and record. Each state constitution reposes the authority and control of education in the state, and in the great majority of cases that is as far as it goes. For it is distinctly up to the local or county units to furnish the funds necessary to carry out the national ideals and the state's requirements regarding public schools. Alabama, where the state is contributing a larger share of the money necessary for public schools than in any other state, raises 51.3 per cent of the revenue for schools. Then there is a rapid slump in the proportion raised by the state, until we come to Oregon, at the foot of the list, which contributes only 4.8 per cent of the total from state funds. The vast number of the states contributes less than one fifth of the total to the support of schools from state sources.

The conditions described above would not cause us so much worry, if only wealth were equally distributed over the country as a whole. Unfortunately, this is far from being the case. In 1922 our national per-capita wealth was \$2918, but that for each state ran all the way from \$1216 for Mississippi, through \$4274 for Iowa, up to \$6998 for Nevada. Not only do we differ in wealth, but the income varies just as much. In statistics given in the N. E. A. Research Bulletin for September, 1924, the average income per child in the five richest states is \$3356, and for the five poorest is \$960, or about two sevenths as much. The discrepancy would have been greater still had the figures been taken for the very richest and the very poorest. Wealth and income are probably the two best indexes of ability to support public education, and it is interesting to note how the expenditures for schools in these rich and poor states compare. We find that the five poor states in 1920 spent \$10.76 per child for schools, while the five rich states spent \$50.37, or about five times as much. These figures would seem to indicate that income is a fair index of what a community will be able to spend upon education. This whole matter of the inequality of wealth with which to support education as among the states of our union, in view of their equality in the councils of the nation, and in view of our democratic ideals of an equal opportunity for all, is a question pressing for answer, and we must face it sooner or later with a full understanding of its meaning, and with honest intent to find a solution.

Inequalities Within States

However, since the primary authority in matters of education rests with the state, if this inequality as among states were all, perhaps we should be content to make the best of conditions as they are, and the problem of school finance would worry us less. But, if there is an inequality as among states, there is an even greater inequality among counties within states, and a still greater discrepancy as among districts within a county. My own state of Washington furnishes some good examples of such facts. The assessed valuation per teacher in Adams county is \$193,000, and in Kitsap \$53,920. In Lincoln county two one-teacher districts, No. 57 and No. 101, have valuations of \$18,218 and \$657,280 respectively; or district No. 101 has 35 times the wealth to tax to pay its teachers' salaries that 57 has. In district No. 57, even if the district votes to tax itself to the limit allowed by law-20 mills-the sum thus raised added to the amount which comes to the district from state and county appropriations will give less than \$800 to run its school. At prevailing salaries, this would secure a partially trained, inexperienced teacher for seven months and leave \$30 for running expenses, such as heat, supplies. etc. District No. 101, levying a tax of only one mill and adding the appropriations from state and county, would have just a little less than \$1080. This would secure a normal graduate for eight months, and leave \$80 for running expenses, or a teacher, of the same level as No. 57 could afford, for nine months, and leave \$90 for running expenses. That is to say, with one twentieth of the taxing effort or burden district No. 101 can buy a better teacher and have more money for running expenses than district 57 can possibly have even by taxing itself up to the limit allowable by law. Still our state constitution says that a system of schools shall be provided for the children of all the state. This was the expression of a hope evidently, for surely no one would say that the conditions above described-and they are not unusual—resemble what might be called a system of schools.

The Property Tax Problem

There is a further difficulty which makes the problem of school finance, as well as of financing all public activities, an increasingly serious matter. This difficulty is that the very large majority of all taxes are levied on property, real and personal. This is a survival of the days when wealth consisted in lands and stock and houses, and such things. In those times the possession of land and the other things mentioned was probably a fair index of the wealth of a person, and of his ability to pay taxes. But wealth today, in this age of industry and commerce, is more largely corporate, and the property defined as realty and personalty is, in a very considerable number of instances, but a scant hint of the wealth and financial position of the individual. If one man's capital is land, or livestock, or a place of business, and another man chooses to have his capital invested in stocks, bonds, mortgages, and such, shall we say that one is able to pay taxes, and let the other free? Is this democracy? Is it even just? And yet, where is it the rule to tax property in stocks, bonds, and the like? Occasionally we find such things taxed, but it is far from the

A corollary of the problem raised in the preceding paragraph is the inordinately large share that agriculture has to bear of the tax burden. Tragic as is the fact, it must be admitted that city people often do not hesitate to take full advantage of the opportunity which is theirs to hide things from the tax assessor, and thereby to dodge what would mean a larger tax bill. I hold no brief herein for the greater honesty of rural folks, although I have my own convictions on the matter, but the simple fact is that the farmer's possessions are difficult to cover up. The net result is that he bears more than his just share of the tax burden, levied upon his working capital, while the urban dweller pays less than his share on what might be termed as convenience or comfort or satisfaction, or even luxury capital. The great complaint against high taxes on property today received a hearty backing from the rural districts. A reduction in the proportion of taxes raised by a property tax might afford some relief to agriculture, but it would constitute a palliative rather than a

Other Bases for Taxes

While the tax problem furnishes an interesting, perhaps because so disputed, subject, I am at liberty to treat it here only insofar as it concerns seriously the general problem of school finance. So I shall merely raise the question, which grows out of the discussion in the preceding paragraphs. It is this: Is property a satisfactory basis for the tax for school support? When it comes to a matter of roads, bridges, police and fire protection, it is perhaps not so difficult a matter to demonstrate that a property tax is justifiable, especially if we accept the dictum that taxes should be levied on that

which profits through their expenditure. But it may be somewhat difficult to prove that property benefits through education. At the same time, there is a pretty wide-spread suspicion, almost conviction, that one's income is likely to increase almost in direct proportion to one's education. Statistics which have been collected, with all due allowance for other possible influencing factors, seem to show a relation between education and income. In the five states ranking highest in education, the average annual income of each person gainfully employed was \$1789, as contrasted with \$999 for the five states ranking lowest in education.

Of course, the question may be raised as to whether education is here cause or effect. Be that as it may, the relation is significant, for if better education is the result of larger income, then it may be suggested that larger income is the basis for the willingness to expend more on education, as evidenced by the better schools in the states where the income was greater. Income is the chief, if not the only evidence of the productiveness of capital. To tax capital itself is to destroy its power to produce. It would seem, then, that taxes generally should be shifted from property, or capital, to income, or interest, if for no other purpose than to make the taxing basis more economically sound. And this should be an especially valid argument in the case of education, since it is income which first receives the benefits or fruits of education.

The preceding paragraph should not be interpreted to mean that a tax on income is to be the only source of income for school support, for we are finding new sources of revenue from time to time which may prove even more equable and more economically sound than those now generally in use. I may cite the severance taxes in some of the states, the general tax on the gross receipts of public-service corporations, and inheritance taxes as examples of the better proposals which have had a trial in practice. But we should be open to suggestion constantly as to possible sources that may be used, for we have by no means any systems of taxation that are quite satisfactory. One form of taxation which has been rather generally used in some of the provinces in the Dominion of Canada and which seem to have been rather satisfactory all around, is the general sales tax. The one objection to this which seems to have most weight is that of the farmer, that it takes toll from him at both ends, i.e., when he markets his crop, and when he buys his supplies and machinery. I shall not intrude further upon this question of taxation, tempting as it is, and interesting, but must hurry on with the other problems, for, after all, tax sources is a problem for the economist, not the schoolman.

Source of School Taxes

The other large question of taxation for school purposes is this: What shall be the unit of taxation for school purposes? The figures obtainable on this point reveal the following: (1) That 5.3 per cent of all the revenues for education came in 1920 from federal taxes; (2) that 23 per cent came from state taxes; and (3) that 71.7 per cent came from local taxes. Were we to confine our attention to amounts spent for elementary and secondary schools, the proportion spent out of the local districts would loom even larger; and the worst part of it is that this proportion is increasing year by year. At the same time we are committed to the policy that education is a function of the state. In the minds of many, this last statement eliminates the federal government from responsibility for the support of public schools. On the other hand, there are many who feel that a truly genuine system of democratic education cannot hope to be realized until the federal government does lend its support for the purpose of equalizing the burdens and the opportunities occa-

sioned by the unequal distribution of wealth among the states cited earlier in this study. Control by the federal government there should not be, since the constitution guarantees to the states control of education, but support for the purposes above stated has both precedent and current needs to recommend it.

Allowing the importance of the participation of the federal government in the support of education in the states, the greater and more significant problem current is that of the greater participation of the state in the support of education. To be consistent, those who argue against federal support of education on the ground that education is a state function, must also contend that the support of education is a state rather than a local concern. Interestingly enough, however, this is not often the case, Those who favor the state as against the federal government tend also to favor the local as opposed to the state in matters of taxation for educational support. But opinions of this sort will not solve the problem. The only hope even of its solution lies in a careful consideration of the facts available in the light of the ideals and objectives which we set up as proper for democracy. Let us return now to a more specific consideration of the three fundamental problems involved: (1) The budget; (2) the allocation of taxing responsibility for schools; (3) the apportionment of school funds.

Budgeting Needs Greater Attention

Budgetmaking is beginning to receive some attention, and well it may. While we will all admit that, at best, the budget is a guess, we will hardly maintain that our guesses cannot be made more scientific by means of the following: More adequate systems of accounting; more systematic following of price trends; closer following of the reports of school census; building and repair schedules planned ahead for a period of years; closer following of factors likely to produce an increase in district population, and therefore a rapid expansion in the demands made upon the schools. A detailed treatment of the analysis of school costs, and the determination of budget items is outside the scope of this However, having stated some of the factors in the more scientific making of a budget, I may state further that no system of school finance will receive consistent public support which is not grounded upon a carefully worked-out budget. Taxes more and more, and this is especially true when the schools have to go to the people for additional funds, are being levied on the basis of careful scrutiny of published budgets, and budgets which are not sound have daily less and less chance of "getting by." To say that this is a good thing is merely to maintain that the schools ought not lag behind other large enterprises in getting on a sound footing economically.

Assuming, then, that we have given care to the preparation of the budget, our next problem is to raise the money needed. If our district is poor, this may involve legal as well as publicity difficulties. The reason is that the state has set limits which may not be exceeded in taxing for local school purposes. If there is taxable wealth in the district in large amount, this problem does not arise. But, the fact is that it does arise in so large a number of districts, and the local tax differs so in rate, that the problem of equalizing the burdens of support of schools is now our most pressing problem in practically every state. Some states have frankly faced the issue with the result that approximations to solution of the problem have been reached. For example, California provides that the state shall set aside, from the proceeds of the corporations and inheritance taxes, a sum sufficient to provide \$30 per child in average daily attendance in the state, and that each county shall levy a tax sufficient to yield \$30 per child in average daily

attendance in the elementary schools and \$60 per child in average daily attendance in the high schools of the county, and that these funds shall be used to equalize the burden of school support throughout the state and the

county respectively.

Similarly, Washington provides a state current fund sufficient to yield \$20 per child of school census age in the state, and a county tax sufficient to yield \$10 per child of school-census age in the county. These latter figures mean about \$30 and \$15 respectively per child in average daily attendance. Illinois provides a state school fund of \$8,000,000 per year. Minnesota and Indiana furnish examples of states which levy a certain specified millage on all property in the state to provide a school fund. Tennessee provides that the state school fund, or education fund, which there includes the funds necessary for the support of the university and the normal schools, shall not be less than one third of the total state revenue.

Three State Plans

The foregoing paragraph gives a sufficient number of examples to show the great variation in the manner of trying to meet the obligation of the state to equalize the burden of education in a state. It remains to evaluate these schemes as to the adequacy of their functioning as providing a school basis for meeting the problem of state support of schools. A fixed millage has the indisputable advantage of being perfectly definite, and, in states where the valuation is increasing along with school population, should prove a very satisfactory scheme, provided, of course, the millage is high enough. But it falls down in accomplishing what a state tax should accomplish where school population is increasing and values are declining, as happened in my own state of Washington in 1921. Had we been on a straight millage basis then, our local districts would have been under the necessity of revising their expectations of state aid downward, and of calling upon their local communities for a larger amount of the budget, in order to keep things going on a level with the preceding year.

A fixed sum, as in Illinois, has the advantage of perfect definiteness. But it illustrates the tendency of all fixed sums to be quite small, and it does not provide support in proportion to

school population and needs.

Tennessee's proportional provision illustrates the attempt to tie the school appropriation to other state expenditures. The difficulty is that an economy legislature could almost ruin the schools, not by failing to provide the one third for the schools, but by so curtailing other state expenditures that this one third would be markedly reduced. The worst of it is that this is likely to happen just at the time when the schools need the greatest support from the state, i.e., when everyone is on an economy

rampage.

Let us turn now to the plans which provide a basis for the raising of state funds, which is proportioned to the needs of the school system, as nearly as any funds can be so apportioned. This last is said because it is not possible to forecast exactly what the needs of the schools will be so far as numbers of children to be educated are concerned, and of course the tax levy is always a year behind in the nature of things. But Missouri does provide a school basis for levying its state tax, in that it must be sufficient to provide at least four months of school for all districts in the state. Just what the standard of this school is to be is not stipulated, and this a possible point where the law might be im proved, but it is clear that the law was framed with the schools and their need of definite support in mind. The fund is further guarded by the provision that it shall, in no case, be less than 25 per cent of the total state revenue. Again, California and Washington use as their



NEW USE FOR LANTERN SLIDES
In Public School No. 4, The Bronx, New York City, lantern slides are used by children not only for general class study, but also for individual study. A little homemade box with an electric bulb inside provides the illumination. (International Newsreel Photo.)

bases for the amounts to be raised the average daily attendance and the school census, respectively, of the year just preceding, which emphasizes, in either case, the closest approximation possible to the number who will need to be cared for by the money thus raised.

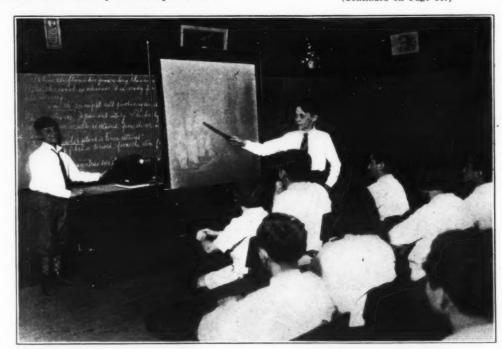
Local Leadership

A criticism which might be leveled at all of these plans is that none of them provides for the increased needs which might be occasioned by an extension of the educational program of the state or local districts. This is probably why the state seldom takes the lead in asking for increased state funds for extended educational facilities, but usually lets these be proved in local communities and at local expense first, adopting these later if they prove successful and secure popular approval. While the state ought to lead in education, there is perhaps something to be said for making this leadership personally and professionally stimulating at first, and then following up with financial stimulation. However, if only adequate leadership can be secured, then the sooner the state learns to urge extensions which are needed and reasonable through the use of state special aid the better we shall find our schools meeting the real demands which society makes upon them.

Having considered the problems of the school budget and taxation, let us turn to the last of the problems to be considered in this paper, that of the apportionment of school funds. I am approaching this problem also as a problem of the state, since the major problems of finance today are those involving the responsibility of the state for assuming the burden and distributing the benefits of education. As the problem of taxation was to equalize the burden, so the problem of apportioning school funds is to equalize the opportunities within the various districts of the state, insofar as this is at all possible.

Equalization of Apportionment

Dr. Geo. D. Strayer, in his study of New York state for the Educational Finance Inquiry Commission, goes so far as to say that equalization is the only problem. In a footnote he takes distinct issue with Dr. Updegraff in his discussion of this problem in the New York ruralschool survey. The latter's position is that the apportionment of state school money should have two functions: first, to equalize educational opportunity and burden; second, to stimulate local communities to extend and improve the character of the schooling given in their local schools. Dr. Strayer maintains that the two functions are incompatible, since the one tends to defeat the purposes of the other. He points out that, if we equalize the burden and opportunity by apportioning larger shares of state aid to the poorer districts, since many of these are having to tax themselves to the limit in order to maintain a satisfactory school, even with the help of the state aid, it is clear that these districts will be unable to tax themselves further, no matter how much stimulation the state may give in the form of special aid for additional effort; and that the wealthy districts will be able to levy additional taxes, and consequently will receive the additional aid which will come partly out of the contributions of the poorer districts, even though the wealthy districts could easily afford to provide all the funds necessary for the special work by a small local tax. If Updegraff means that special aid shall be given to stimulate local districts merely to increase local taxes, for special or whatever purposes, then Strayer's criticism seems to be sound. But effort may be measured in terms of present tax in proportion to full real valuation, as well as in increased tax rate over the rate for the previous year. If the measure of effort is the actual proportion of tax raised to full real valuation, and the apportionments of the state (Continued on Page 140)



THE VISUAL METHOD OF INSTRUCTION The growing use of visual aids for instruction is well illustrated in Public School No. 4, The Bronx, New York City, where slides are used for instruction in various subjects. The class illustrated is made up of cardiac cases. (International Newsreel Photo.)

The Constitutional and Legal Basis of Transporting Pupils to and from School

Glenn H. Kelly, Superintendent of Schools, Houghton, Mich.

1-Constitutionality of Transportation

The courts of the various states are practically unanimous in holding that laws providing for transportation of pupils living great distances from school are constitutional. In most instances these laws have been made to apply to pupils of all grades below the college level, and to include transportation to schools outside the district. In many states permissive legislation regarding transportation of pupils has been given wide and liberal interpretation. On the other hand, only one state has held transportation of pupils to be unconstitutional, while others have given very narrow and limited interpretations to the existing laws. A great deal of confusion seems to prevail in the supreme-court interpretations of the statutes in the various states. There is to be seen, however, a tendency to consider transportation of pupils to and from school an obligation, to be used with discretion, as a legitimate means of equalizing educational opportunities for all

The supreme court of Kansas in the case of School District No. 3 of Atchison Co., v. Atzenweiler has held that a law which imposes a liability on school districts for transporting children to and from school is "a valid enactment within the meaning of the constitution." The supreme court of South Dakota² has held that the fact that certain districts are not in the list of districts enumerated in the statute as being authorized to transport pupils does not deprive them of the authority to convey pupils when in the judgment of the board of education such conveyance is expedient in equalizing educational opportunities for all the children of the district. Quoting: "It is true there is no statute specifically authorizing independent school districts to furnish conveyance to pupils yet we find in this provision it (the indedendent district) shall possess the usual powers of corporations for school purposes. The provision seems to be broad and comprehensive and may well be deemed as covering the matter of transportation of pupils. To us there seems no natural reason why it should not be as necessary to provide for transportation for pupils attending school in an independent district as it would be in the common-school district. In fact it is a matter of common knowledge that independent districts, in point of area may be much larger than the common-school districts."

On the other hand, the courts of Arkansas and Georgia have held that only certain districts may transport children, namely; those receiving state funds. Those districts operating on local funds are not permitted to transport children to and from school.3 It has been held that funds may not be used in transporting children to schools outside the district, since the act says nothing about transporting children from one district to another.4

In Kansas⁵ and Iowa⁶ pupil-transportation laws have been interpreted to apply only to pupils below the high-school level, while in Texas7 the courts hold that the school-transportation act as passed does not authorize free transportation of children to and from common

schools, meaning the grades below the high

The constitutionality of providing transportation for pupils to and from school seems not to have been challenged except in Illinois. In all other states it seems to have been accepted as a rational and legal method of giving all children more nearly equal opportunities for education regardless of their places of residence. The Illinois court said: "To secure the right and opportunity of equal education does not require that children should be hauled to school any more than it would require that the directors should clothe them and furnish them meals. The acts of the directors in hiring wagons and making contracts for the hauling of children were beyond their powers and illegal

In Mississippi9 the supreme court has held that a law authorizing trustees of consolidated districts to provide transportation of pupils living more than two miles from school, the expense to be paid out of the county school fund, is not valid as authorizing the diversion of school funds in a purpose not authorized by the constitution, since school funds are to be used to maintain the schools, and the transportation of pupils is an item of expense in conducting schools. The only question then, in Mississippi, relates to the use of the proper funds.

II-Highways

Some of the earliest cases which deal remotely with the question of transportation were in Iowa¹⁰ where in 1881 and 1888 the question of appropriating money to build roads to make schoolhouses more accessible, was carried to the supreme court. The board of directors and the electors at their annual meeting authorized their secretary to take the necessary steps to secure the location of a highway to pass the schoolhouse. A citizen of the district brought suit to restrain such action on the ground that it involved the spending of public money illegally. The quotation from the court is quite illuminating and establishes a very definite principle: "It appears that no highway was located by said schoolhouse. Whether the schoolhouse site was selected before the enactment of the section of the code which requires schoolhouses to be located on some public highway or whether it was so located and the highway vacated does not appear. It will be presumed that when located the location was lawful. We then have the question whether it was lawful for the school district to incur expenses in endeavoring to secure the location of a public highway by which the scholars attending the school may do so without being trespassers on private grounds. We think the bare statement of the proposition is sufficient

"Section 1748 of the code provides: 'the money collected by district tax for the erection

*Mills v. School Directors, 154 Ill. Appl. 119.

*Bufkin Chancery Clerk v. Mitchell, 63 So. 458, 106 M188, 253.

¹⁰Independent District of Flint River v. Kelly, 8 N.
W. 426; McShane v. Board of School Directors, 41 N.
W. 33.



of schoolhouses and for the payment of debts contracted for the same shall be called the schoolhouse fund, that designated for rent, fuel, and other contingent expenses necessary for keeping the schools in operation the contingent fund.'

"It is contended by the counsel for the appellant that the expenditure in question was not necessary for keeping the school in operation. Whether it was necessary to keep the schools in operation, that a public road should be established to or by the schoolhouse was, we think, a proper question for the board of directors to pass on. What the facts were we can not determine. It may be that the owners of the land surrounding the schoolhouse forbade trespassing upon the grounds. If so, not a scholar could lawfully go to the schoolhouse and not a load of fuel could be taken there and the school under these circumstances could not be kept in op-

The supreme court decisions in the cases cited above established definitely the principle that school districts might establish highways for the purpose of making schoolhouses accessible to pupils where the school buildings are not located on any highway. The next question which might arise is: Can this principle be carried to the extent of establishing additional highways to schoolhouses already situated on highways? In the case of Boggard v. Independent District of Plainview, et al.11 in 1895 the supreme court decided in the affirmative. The court is quoted in part: "Appellant's next contention is that it is only when a schoolhouse is not situated on any highway that the power to obtain a highway at the expense of the district exists. We see nothing in the language of the statute nor in its interpretation to warrant such construction. The purpose of the law is to provide means of access by public highways to schoolhouses of the state and not to leave pupils dependent on the consent of some landowner for the opportunity of attending school. The right to obtain highways at the expense of the district is not limited to cases where the schoolhouse is not upon a road nor to cases where the private right of pupils to pass is refused."

III-Compulsory Transportation

There seem to be few sweeping statutory enactments which make transportation compulsory in all districts; however, some courts have held that under certain conditions, to be discussed in a later section, permissive legislation may become mandatory. In Indiana, in 1912, the appellate court held12 that the school trustee was bound to furnish transportation to and from school for pupils living in an abandoned school district (the word "district" as used in Indiana school townships has more the meaning for "ward" as used in school cities), even though the trustee had never officially notified them of their transfer to a particular school. In the case of State ex rel Stockton v. Lane et al,13 the court held that, where a statute required the transportation of all children living over a certain distance from the nearest schoolhouse, the authorities might exercise judgment and discretion as to the means employed. If, however the authorities fail to provide transportation, the parents may maintain action against the trustee without appeal to the next authority of appeal, namely the county¹³ superintendent of

¹³61 N. W. 859. ¹²Patterson v. Middle School Township, 98 N. E. 440, 50 Ind. Appl. 460. ¹³111 N. E. 616, 184 Ind. 523.

¹73 P. 927, 67 Kans. 609. ²Dahl v. Independent School District, 187 N. W. 638. E. 721.

S. E. 721.

McKinzie et al. v. Board of Education (Ga.), 124

McKinzie et al. v. Board of Education (Ga.), 124

McKinzie et al. v. Board of Education (Ga.), 124 Hendrix v. Morris, 191 S. W. 949, 127 Ark. 222.

*Board of Directors of School District of Gould et al. v. Holdtoff, 285 S. W. 357, Ark. Sup.

*State ex rel. Palmer Co. Attorney v. Crugan et al., 243 P. 329.

[&]quot;Tow v. Dunbar Consolidated School District et al., 206 N. W. 94. "Jennings v. Carson, 184 S. W. 562.

schools, or in the State of Wisconsin, the state superintendent of public instruction.14

The supreme courts of Oklahoma and Ohio have held that the boards of education in certain types of districts are bound to transport the children living over a certain distance from the nearest schoolhouse regardless, whether or not consolidation of schools has affected the distance which the children of the district have to travel to reach the schoolhouse. 15 In Ohio the courts hold that a board of education must furnish high-school facilities or make them available by transportation or board and lodging, and lack of funds is no defense of duty of a board of education to furnish high-school facilities.16

IV—Permissive Legislation

May Become Mandatory. Permissive legislation regarding transportation of pupils may, under certain conditions, become mandatory of the board of education, as when the voters of a district express their wish by vote.17 Where districts are permitted by statutory acts to consolidate their schools and transport pupils living beyond a given distance from a schoolhouse of the district, the act is permissive "as a whole, yet, if the district exercise the power to discontinue the school, the duty to furnish tuition and transportation to pupils becomes mandatory."18 A settled purpose of the state is to provide, foster, and protect educational facilities for all. The board of education has authority to use discretion which is not unlimited but is such as will best subserve the interests of education and will give all pupils of the district as nearly equal advantages as may be practicable.¹⁹ The supreme court of New York²⁰ has held that permissive legislation regarding transportation may become mandatory in certain districts by order of the commissioner of education of the state.

It is also quite commonly held that means other than transportation for providing educational facilities for children living long distances from school are permissible. In a South Dakota case the court held it mandatory that the board of education furnish room and board for children living too far from school to be transported daily. A statute provides that, in the absence of satisfactory transportation facilities, it shall be the duty of the board to make such provision for the schooling of the children as shall be determined by the county superintendent. The court held that it was within the power of the county superintendent to determine what provisions should be made and arrange all details himself and the board of education must make the provisions determined by

Not Mandatory. Permissive legislation is not always held to be mandatory.22 The wording of statutes and individual differences in court opinions seem to enter into the interpretations given the various legislative acts. When children live sufficient distances from the nearest school in their district to demand transportation, the trustees may refuse transportation on the ground that there is a school in an adjoining district under the distance for which the children may demand transportation.23-24 This position has not always been taken, however, and in an Arkansas case25 the court held that

the use of public money for transporting children to another district, where the payment of tuition is involved, is illegal. The fact that a district has already raised the money specifically for transportation does not compel the

THE WEAK LINK

I visited a fine new school With all improvements made, Where cleanliness was quite the rule And health, the prime crusade; marveled at the shining halls, The wide and sturdy stairs, And gazed at paintings on the walls, Each one of which compares Quite well with masters rare and best; And then, the desks, the board, Assembly hall and all the rest Shone brightly in accord: But just before I turned to go With praise, my thoughts were shorn; For here where dirt was called a foe The BOOKS were old and worn!

-Paul J. McCann.

school authorities to furnish transportation. The school authorities have the right of discretion in the matter.23 Likewise in a Kentucky case²⁶ the court held that a board of education, once committed to the policy of transportation of pupils to and from school, does not thereby deprive itself of the right to change that policy

Contrary to the case cited under the discussion of compulsory transportation,27 the su-

²⁴State v. Board of Education, 11 Ohio Appl. 298.
 ²⁵Board of Directors v. Holdtoff, 285 S. W. 357.
 ²⁶Crago v. County Board of Education, 252 S. W. 137,

Ark.

27Mendenhall v. Slim Butte Dist. No. 4, 196 N. W. 97.

preme court of Massachusetts²⁸ has held that,

even though the laws provide that a town may furnish transportation for children, it is not compelled to transport children to and from school, who live on an island off the coast where access from the island to the mainland was always inconvenient and at certain seasons impossible. In Tennessee²⁹ the transportation act is permissive in character, providing that when sufficient numbers of children reside too far from school to attend otherwise, the school district may furnish transportation for children. In the opinion of the supreme court the law is not discriminatory and that discretion lay within the authority of the district.

Similar decisions have been based on the principle that it is the duty of the district to furnish as nearly as possible equal educational opportunities for all, as long as in so doing the educational advantages of all the other children are not substantially decreased.30 In the opinion of the same court the hauling of a crippled child to school, when the child lived less than a mile from school, would be incurring such an expense.31

The Supreme Court of Vermont, in the case of Carey v. Thompson, has decided that, since the law providing for transportation of pupils to and from school is permissive in character, furnishing transportation is within the discretion of the board of education and in the absence of intentional discrimination mandamus will not lie to compel such transportation.32

(The second half of this important summary will appear in the JOURNAL for February, 1928.—Editor.)

²⁸Newcomb v. Inhabitants of Rockport, 66 N. E. 587,

Newcomb v. Inhabitants of Rockport, 66 N. E. 587, 183 Mass. 74.
 Cross v. Fisher, 177 S. W. 43, 132 Tenn. 31.
 Fogg v. Board of Education, 82 A. 173, 76 N. H. 296, 37 L. R. A. (N. S.), 1110.
 Berry v. School Board of Barrington, 95 A. 952.
 665, 30 A. 5.

The Married-Woman Teacher

By An Oregon School-Board Member

We have come to accept the married woman in industry with few comments, but when the school board of our district last engaged teachers to fill vacancies, we first came in contact with a strongly expressed sentiment against the employment of married women as teachers.

Since the war the increase of married women teachers in our section of the Pacific coast has been marked. A teaching position offers a good opening for married women who have a desire to eat their cake and have it too. It gives them short hours, so that they may care for a home, if they do not give too much time to schoolwork; it gives them higher wages than industry usually offers, and it allows them a long summer vacation.

In one of the cities of Oregon the school board has placed itself on record with the statement that it will employ no more married teachers. In Portland married women, as a rule, are not considered when new teachers are engaged. However, about 25 per cent of the Portland teaching corps consists of married women because in that city a tenure-of-office rule is in existence, and after two years' service a teacher cannot be dismissed except for cause. Marriage is not regarded as an adequate reason for discharge, and teachers marry and continue to hold their positions.

The efficiency of the married and unmarried teachers seems to enter very little into discussions of the question. Married teachers with husbands who are also employed are able to set a standard of living higher than that which families, with only one breadwinner and from three to eight members, cannot equal except in rare instances. This fact seems to be the greatest objection to the employment of married women in our district.

Of course, all these married teachers need their positions and the salaries that go with

them. They openly admit it. Their husbands are earning only \$150 a month, or perhaps even \$500 a month, and they need the little salary they draw from the schools just to keep their heads above water. They are not greatly impressed when it is pointed out to them that some families with several children seem to get along decently on less than \$5 a day. Of course, the mothers in such families cannot get out and teach school, even though some of them have been teachers.

Some of the married-women teachers are merely selfish. One young woman expressed her sentiments in the rather frank way of this very frank age: "I am earning \$125 a month; my husband is earning \$150. We are going to have some children some day, but I am never going to do it if I have to look as dowdy as some of

The influence of teachers, both conscious and unconscious, is to be taken into account as well as their ability and efficiency in the classroom. A teacher, who because of considerably better financial circumstances, feels herself to be better than most of the school patrons, and shows that she does, may expect some resentment from the people who are paying her wages. Her influence outside the schoolroom is not good.

Another angle to the question was brought out by two fathers who are sending their girls to normal school. These men fully understand that there is a limited number of teaching positions within the state. If married teachers are allowed to keep their positions, as has been the practice in most districts, the increased enrollment of students in the normals is useless. We have recently increased the number of normal schools in this state from one to three, which would seem an expansion that is not needed if the demand for new teachers continues to be cut down.

Schaut v. Joint School District No. 6, Towns of Lena and Little River, Wis., 210 N. W. 270.
 14 Ohio Appl. 64; 104 Okla. 185, 230 P. 739.
 State ex rel. Matsters v. Beamer et al. Board of Education, 141 N. E. 851, Ohio.

¹⁷State ex rel. to use of Gastineau v. Smith, 196 S.

¹⁸Dennis v. Wrigley et al. (Michigan), 141 N. W. 605.

 ¹⁹S2 A. 173, 76 N. H. 296, 37 L. R. A. (N. S.), 1110.
 ²⁰Board of Education Union Free Dist. No. 2 v. Town f Brookhaven, 210 N. Y. S. 439.
 ²¹Mendenhall v. Slim Butte District No. 4, 196 N. v. 97.

 ²²Board of Education, Frelinghuysen, Twp. v. Atwood, 62 A. 1130, 73 N. J. Law 315, 74 N. J. Law 638.
 ²³State v. Jackson, 81 N. E. 62, 168 Ind. 384.



School Board Journal

WM. GEO. BRUCE WM. C. BRUCE

EDITORS

EDITORIAL

THE CHICAGO SCHOOL COMEDY AND ITS TRAGIC ASPECTS

The political flare-up which has entered the Chicago school system has been raging for a month or two with picturesque luridness and dramatic intensity. The hearings which have been staged by the Chicago board of education in which that body becomes the prosecutor, judge and jury that is to determine the fate of a school superintendent, is no longer a local scrap but a spectacle that is commanding nation-wide attention.

Mayor William Hale Thompson, in his campaign for that office last spring, made the local school superintendent an issue. That official was charged with being pro-British in that the textbooks he permitted to be used in the schools were alleged to be anti-American. After the mayor had entered upon office it was up to the board of education, whose members are appointed by him, to redeem the preelection pledge made by the executive. This meant the removal of the offending school officer.

The board of education, in response to the mayor's orders, suspended Superintendent William McAndrew, charging insubordination and the fostering of an un-American spirit in the schools. Citizens of the Jingo type were asked to testify. The British lion's tail was twisted again and again. King George must not be allowed to rule Chicago. Muzzey's history became the immediate object of attack. Incidentally a Canadian professor was accused as the man who had poisoned American libraries. The texts were dictated by Buckingham Palace, etc.

Then four bombshells burst in one day. David Saville Muzzey, author of the textbook under fire, filed a \$100,000 damage suit against former Congressman John J. Gorman who had urged the charges. An order was issued by the mayor that all tainted books in the library be burned. Superintendent McAndrew was told that no other city would ever want the schoolmaster's services. Finally, that the antics of the superintendent were making Chicago the laughing-stock of the world.

The sputterings of the politician cannot be checked. The hearing conducted under auspices that are foreordained, will inevitably lead to conviction. McAndrew was found guilty before he had been tried. The trial merely gave the semblance to going at things in an orderly way.

The fact is that neither Superintendent Mc-Andrew nor the history textbooks are on trial. The city of Chicago is on trial. Its board of education is on trial. The question is whether the school system of the great mid-west metropolis shall be conducted by educators or by politicians, whether truth and honor count for anything, or whether experience and self-interest shall control. The textbook squabble is not new.

It has broken out again and again in various sections of the country where an ultrapatriotic spirit has gripped men and has prompted them to confuse historic facts with an unreasonable idealism. The American author has nothing to gain, and much to lose, by upholding an untruth or unfounded statements, more specially when he writes textbooks that are to serve the schools of his country. Educational publishing houses are not likely to risk their prestige and business interests by putting out textbooks that are unreliable and hostile to American interests.

The law suit brought by the author against a prominent citizen in a large American city may tend to shed considerable light on the question of textbooks, and may do much to give the general public some knowledge as to just what ought or ought not to go into our school histories. If the author has told the truth then the question is whether he has told the whole truth, or how much of that truth ought to remain untold.

The deplorable part of the Chicago disturbance is found not so much in that a history controversy has arisen as it is in the conflict which has arisen between the political and educational forces of the community. When the stability of educational leadership becomes interwoven with political fortune then it logically follows that the schools will not be the gainer thereby. The interests of the school child must precede those of the aspirant for political power.

The Chicago Tribune of recent date says: "The danger point to the people of Chicago is in the board rooms of the department of education, where, under the guise of trying Superintendent McAndrew for insubordination, the attempt is being made to sell out the school children in the interests of spoils politics. Chicago can live down the shame of being made the laughingstock of America and the world. Common sense and American neighborliness will cure the ill feelings aroused in this campaign to set foreign and unpatriotic allegiances at one another's throats. But the effects of the cheap political attack on the school system will long persist. Resilient as youth is, the generation now in the Chicago schools cannot help but be marked by being made the victims of demagogic barter and trade."

If the rest of the country is concerned in the controversy which now afflicts Chicago's school system it is because that system is an integral part of America's school system, and in the sense that the undermining of any one part of the system is locally deplorable, it also follows that it is equally deplorable as far as the educational prestige of the nation as a whole is involved.

THE EDUCATOR AS A LOBBYIST BEFORE THE LEGISLATURE

Every little while a schoolmaster, who believes that his profession is under an unjustified restraint on matters of a political nature, breaks out publicly into some rash statement and gets himself into trouble. He conscientiously believes that he possesses the right, as an American citizen, to voice his sentiments for or against any measure as do other citizens, but he frequently fails in measuring the expediency of his act.

"The teacher has as much right to lobby in the legislature as a doctor, a lawyer, or an engineer; also a teachers' organization has as much right to maintain its committees in the state capitol during the legislative session as has the State Chamber of Commerce, the League of Women Voters, the State Federation of Labor, or the State Grange" declared J. Herbert Kelley, executive secretary of the Pennsylvania State Education Association some months ago before an educational convention.

"It does not follow, however," adds Mr. Kelley, "that having the right, it is expedient for a teacher or a teachers' organization to exercise that right at all times; but there are times and occasions when it is imperative that the right should be exercised."

That is well said, and in a way covers the whole subject. It remains for organizations that send representatives to appear before legislative bodies to exercise judgment as to what is to be defended and what is to be opposed, and that the person chosen for the task exercise tact, skill, and diplomacy in dealing with the legislative factors.

It is not only permissible but highly desirable that educational bodies and leading educators be heard on matters affecting the school interests of a state. Moreover, the progressive legislator welcomes the judgment of the schoolmaster on all measures involving an educational interest.

The experience of the past few years has demonstrated that the educator is as likely to overreach himself when he appears in the role of a lobbyist as is the other fellow. In one state a normal-school president was so promiscuous in legislative affairs that the governor was impelled to send him home. In another state the secretary of a teachers' organization became so officious that the legislature denounced him openly and apparently with good cause.

These things are not helpful to the case of education. In fact they are harmful. The accredited representative of an educational body or a school system can always secure a respectful hearing before a legislative committee. He may not always succeed in his contentions, but he certainly cannot win his case by pestering the legislators or by engaging in intrigue and underhanded methods.

When it comes to a public denunciation of the lawmakers of the state, or of the authorities of city or county, the schoolmaster is not as free to engage in criticism, as is the citizen who is not officially connected with the government. The educator who is engaged to train the youth and paid by the public to perform that task, is not expected to step outside of that task to correct the errors of government.

That partisanship which enters into the making of government, namely, the selection of those that control, is always intolerant of the criticism, more specially if inflicted by one attached to any one branch of government. The man or women connected with a school system is in a certain sense a public official, and therefore subject to the discipline that governs such official.

EDUCATIONAL EXPANSION AND RISING SCHOOL COSTS

The general economic conditions of the country are unquestionably reflected from time to time in the financial policies which guide the administration of the schools. Material progress tends to a more liberal attitude in accepting new innovations and departures which involve greater expenditures. The budget is not as rigidly pared in good times as it is in bad times.

The country as a whole is experiencing a prolonged period of prosperity, and the increase of property in volume and value has in the main met the tax tributes required for growing school budgets. The school administrator has become accustomed to the thought that next year's budget will require more money than that of last year.

The educator is certain that the schools have not reached the maximum of service. He holds that an equality of educational opportunity consistent with the spirit of democracy has not been reached. Consequently a policy of educational expansion must continue. The percentage of increase in school costs which has obtained during the past two decades must continue, he contends, for some time in the future.

It is well, however, to stop occasionally and consider whether the situation as a whole has been fully measured and estimated, or whether there is not a tendency to enlarge upon some one phase of a situation, and thus get a disproportionate view of the whole.

Let us assume that whether the country continues to be prosperous or not, the schools must continue to progress, that they must strive to render the highest measure of service, that expansion in school activities must continue, and that larger budgets must be provided. The uncertainties which attend our economic stability cannot, however, be ignored. Reverses have asserted themselves in the past and will assert themselves in the future.

Aside from any contingencies which may spring up in the financial world a situation, however, has arisen in the educational field which cannot be ignored. The salaries for professional services have in the main been brought up to a high figure. No one claims that they are too high, and there are sections and communities here and there where the salaries ought to be higher. But, on the whole, they are higher than they have ever been in the history of the country. Coupled with this fact, we are confronted in this broad land with the remarkable spectacle of having one hundred thousand trained teachers out of employment.

Placing the two facts side by side—namely, high salaries on the one hand, and a teacher surplus on the other—the tendency is to apply the law of supply and demand, in adjusting salaries. Where school expenditures are subject to fixed budgets and to high standards in professional service, no salary decline is likely to follow, but in the smaller districts the bargaining spirit between teacher and school official has begun to assert itself. Smaller salaries are offered and accepted.

The situation seen in its entirety prompts caution and circumspection, and suggests a course of administrative procedure that can successfully withstand the reaction when it comes. That simply means that expenditures for new buildings, the expansion of school activities, and the maintenance of salary schedules, must be justified in the light of reason and rational conservatism.

The elimination of waste must continue and the exercise of economy must be practiced regardless of good or bad times. The situation affords the opportunity for inaugurating higher standards in the professional services employed in the schools. No progressive American citizen will object to high school costs if the service rendered by the schools is of a high order.

When the reaction sets in, as it surely will, it will lose much of its force when it can be safely asserted that schoolhouses have been wisely and economically built, that the expansion of the school program was in keeping with local educational needs, and that the salary schedule commands the highest type of professional service.

FAVORING LOCAL TEACHER TALENT

A few years ago when the nation was threatened with a teacher shortage there was a tendency all along the line to ease up on rules and regulations governing the employment of professional service. The immature and the superannuated, as well as the nonresident, were admitted to the school system. Standards were lowered, and salaries were raised. No school was left in a teacherless condition.

Today the situation is entirely different. Instead of a teacher shortage there is a teacher surplus. Thousands of persons trained for the profession of teaching are without positions. This condition applies not only to certain states but is quite general throughout the country. In point of remuneration the profession is more attractive than it was some years ago.

With the change that has come about, the former rules affecting standards have been tight-ened once more. There is a tendency to eliminate the immature and the superannuated. The educational executive who is held responsible for the efficiency of a school system is more discriminating in the choice of his force. He realizes that the opportunity to strengthen the professional service is at hand, and to that end does not discriminate between local and outside applicants.

On the other hand the pressure for place and position has crowded itself upon the school-board member. He is importuned to champion the cause of the local aspirant as against the outsider, to support the unmarried as against the married woman teacher, or to foster unearned promotion.

And what follows? In a well-administered school system, where the superintendent is entrusted with the duty of nominating teachers, selecting textbooks and building courses of studies, there is a tendency to kick over the best traditions, by transferring a professional task to a nonprofessional factor. Thus, boards of education have in several instances cast aside the recommendations of the educational expert in the selection of teachers by making their own selection.

This attack upon established conceptions in school administrative procedure has recently led to some embarrassing situations. In a Missouri city, for instance, the superintendent proceeded to find a high-class principal to fill a vacancy in one of his schools. Such a man was found in a neighboring city, and was notified to come and enter upon his duties. The school board had always ratified the superintendent's nominations and it was therefore deemed safe for the principal to resign his old position and come to accept the new.

But he had been on the job just one day when the school board met, rejected the appointment, and named a local aspirant who did not have the support of the superintendent. In brief, the new principal fell between two chairs, and the school board by the action ignored the function of the superintendent's office. The old employees of the school system said the action was the first of its kind within their memory.

The case merely demonstrates what local pressure may do in upsetting the best traditions in school administrative procedures. It is by no means contended here that the local aspirant for the principalship was inferior to the outside applicant. The question, moreover, is whether a strictly professional task can in the nature of things be wisely entrusted to the nonprofessional factors. Again, whether it is to maintain an educational executive, undermine his authority by thrusting upon him aids not of his own choice, and then hold him responsible for results.

The controversy over local and outside talent in the schools is an old one, but it has found its best solution in the rule that character and ability, regardless of residence, must determine the selection of the teaching forces. Members of boards of education have welcomed the adjustment whereby the chief school executive is vested with the responsibility of naming the personnel that is to serve the system.

This conception of executive prerogative has been observed in the management of financial,

commercial, and industrial institutions and generally recognized as sound. Boards of education have been glad to accept this plan of administration, because it relieves them from the performance of a duty for which they have not deemed themselves fitted.

Finally it is a backward step to ignore the accepted conceptions, which are the outgrowth of years of experience and experimentation, and to observe obsolete methods in school administrative affairs.

SHALL SCHOOL ELECTIONS BE HELD WITH OTHER MUNICIPAL ELECTIONS?

The spring school elections have again in some sections of the country raised the question whether such elections shall be held on separate dates, or held in connection with other municipal or local elections. The immediate cause for raising the question is found in the meager participation of the public in school elections in some communities where these were held separate from other municipal elections.

It is true that the election of the regular city and county officials tends to draw a larger fraction of the voting population to the polls. The candidate for the mayoralty or for aldermanic distinction usually enters upon a spirited campaign. He lets the public know that he is a candidate, and wants to be elected. The candidate for the board of education is usually less aggressive. The office he seeks to fill calls for more dignified campaign methods.

The election, however, of members for the board of education at the time and place when the regular city officers are elected has its drawbacks. The vote may be larger, but less discriminating as to choice. The mind of the voter may be centered on the candidates for mayor, treasurer, comptroller, aldermen, etc., rather than upon the candidates for the school board. Again, political trading is sometimes engaged in, which may be detrimental rather than beneficial to the school-board personnel.

A school election held separate and distinct from other municipal elections has the tendency to a more discriminating selection of the candidates, but it may also follow that such an election is attended with a diminished vote, unless a spirited rivalry rather than a passive contest is staged.

The tendency during the past decade or two has been toward separate school elections, but the complaints that such elections are ignored by a large fraction of the voting public are also heard. If the schools are to be kept out of politics, then the board of education must keep out of the heat and turmoil of general city elections, in order that the calm and nonpartisan judgment of the public be obtained. Time and experience have taught that lesson.

Where separate school elections are engaged in, it does not follow that the individual candidate should urge his or her cause with an unseemly anxiety, but rather that it becomes the duty of citizens' committees to make an effort to secure a reasonably complete expression of the popular choice. In some of the larger communities, where the aspirants for school-board honors are not sufficiently known to the general public, certain names are recommended for consideration. In the smaller communities where the candidates are fairly well known to the constituency special publicity of this nature is not necessary.

The effort, however, to bring out a complete vote should in no case be omitted. The public should be reminded that the duty to elect members of the board of education is as sacred as it is to elect any public official, and that good citizenship exempts no American voter from that duty.

Cooperative Supervision from the Viewpoint of the Elementary School Principal¹

Elizabeth McCormick, Elementary Principal, Superior, Wis.

In this discussion I shall attempt to do three things; first, to define cooperation; second, to picture the principal in his relations to other members of the educational group; third, to show how training for leadership grows out of cooperative supervision.

There is nothing new or startling in the rule. "Do unto others as you would have others do unto you." It is the code of conduct that for ages has been held up as the proper guide in our relations with our fellowmen. We must serve others. We need their help. The spirit of service is the soul of cooperation. By cooperation we come to know each other and each other's needs. Through conference, collaboration, and appreciation we may more rapidly progress toward educational ideals. Ruskin and Morris taught two doctrines which educators are coming to believe. First, that the workman must have pleasure in his work; second, that the world must share the pleasure of the workman in the use of the product.

Personality must be given a chance to express itself. Ultimate truth is what we all seek. It is well to think of philosophy as a knowledge of the laws of intellectual and spiritual relationships, and the actions which grow out of them. Without this knowledge no one may lead others. The observance of these laws will bring cooperation.

Cooperation Needed in Supervision

There has been too much individualistic work in the teaching profession. This has resulted in unnecessary competition. Competition always means war, and war is always destructive. Cooperation means the opposite to competition.

In a really cooperative, educational unit, all concerned, from the superintendent down to the classroom teacher, will organize democratically and voluntarily to gain their objects through mutual action in which the motive will be for the same ideal—the common interests of the children.

The Greeks selected officials by drawing lots. Perfect concord between supervisors and teachers will come when the spirit of cooperation takes the place of the principle of competition. The purpose of school unity must be in the interest of the child and not for the self-seeking individual.

The fundamental aim of cooperative supervision should be to bring out and to perpetuate the ability to be of the greatest service. Teachers and principals on the one hand, and principals, supervisors, and superintendents on the other, should be working so closely together on the common problems that, as the older drop out, the younger may take their places without loss to the schools. This is what will happen when the method is cooperative. Cooperation builds gradually as it goes. It simply recognizes and uses human values.

In order to cooperate we must understand each other, lay all self-seeking aside and together look for the practical means of doing the greatest possible good to the children of the land. We must support each other. We must reject self-pride and petty jealousy. To do the greatest good, superintendents, principals, and teachers must be united by cheerful cooperation. Isolation is weakness. Union is strength. "The experience of his own weakness urges man to call in help from without. We may have high ideals. To achieve them is quite impossible without the help of others."

There can be no question of the advantage and importance of unifying the educational thought of all the educational workers. Already there has been some measure of success in this cooperation, but the fact that we are not satisfied yet and that we still aim for further cooperation is a good sign.

The Principal's Responsibilities

The principal holds a strategic place in the educational system. His problems are very real; his responsibilities are very great. He is confronted on the one hand by the teachers with their individual needs, and on the other by the demands of the superintendent who cannot possibly carry out his educational policies effectively without him. He must give unswerving loyalty to his superintendent; he must secure loyalty from his teachers. He holds an intermediary, interpretative position. He must be willing to accept responsibility; he must be willing to contribute something of himself for the good of the system.

A superintendent of schools once said to me, "A principal will be known by the accomplishment of his teachers." True, and the wise superintendent is the one who is content to be known by the work of his principals and other subordinates. "Who does a thing through another does it himself" is an old Roman motto.

A principal must loyally support the policies of his superiors, but he must be a leader himself. He who would lead must first be able to follow. He should never issue a call to action without the certainty of right and the warrant of authority. The superintendent comes with his wider vision to advise, to indicate new opportunities of service, to give inspiration and deeper significance to daily tasks. All these things must the principal pass on to the teachers. In addition, supervisors and principals with their more intensive study of the academic and administrative details, must bring to teachers the more intensive analyses of significant problems.

Leadership in Education

There is lack of leadership in education, and it must be admitted that this lack is much influenced by the spirit of autocracy and the exaltation of the importance of the administrative and supervising officers. Educators will never promote the best in their profession so long as



they find reward in acting for themselves and against others.

The teacher, supervisor, principal, or superintendent who lives the largest life is not the one who sways subordinates to his purpose; not he who gains a little temporary fame for certain accomplishments of well-proved theories, but he who lives in sympathetic relations with his fellow-workers; not the one who gets what he wants by compulsion; not the one who dominates, but the one who is in harmony with the life of his group.

The principal must be a person of ever-advancing ideals, but must not be in too great haste in reaching them. He must draw near to the teacher that he may influence her. He must draw away from her that he may give her liberty. "He must not try to bind the vine so close to the pole that he causes it to snap."

A principal should be acclaimed great, not in the degree to which he has done a work which may not be duplicated, but to the degree in which he has been instrumental in leaving successors who can equal or pass him in educational achievement.

The true force of supervision is shown in being able to call out the initiative and constructive ability of teachers, and in bringing the individual teachers into full participation in the solution of the common problems of education.

Encouraging Responsibility on the Part of Teachers

Not all teachers desire responsibility. There are many too content to simply do as they are asked. Every teacher who goes forth from a normal school or teacher-training college should have the disposition and the ability to play a part—his own part in the educational drama.

On the other hand, many teachers are no longer satisfied with being blind imitators. They are individuals. They are ready to assume responsibility for doing things. They welcome set tasks but they accomplish more when permitted to work out the details of problems in their own way. A principal should permit large liberty in his school in order to set free more original thought and more initiative.

"How do you do it?" I asked a principal who is doing some extraordinary work. "But I don't do it," she said, "the teachers do it. I encourage great freedom."

The superintendent may pass on his educational theories to his principal, and he in turn may pass them to the teacher, but theories only will they be until intelligence and mental activity work them out in their own way.

The big superintendent and the big principal pass on big ideas and appeal to intelligence in subordinates instead of demanding blind obedience. The really big principal and supervisors, with the right attitude, admit that once in a while the classroom teacher may happen to have an idea as important as any of their own.

Every person who creates anything takes from the past and gives to the future. There is little actually new. The most learned, modern educator is himself not a genius. He is himself plus all the great teachers that have lived from the time of Moses to our best present-day leaders.

A principal may be a specialist, he may be able to sort out the wheat from the chaff in the stack of modern educational values, but he cannot add permanent values to educational methods until he recognizes the broad, ethical principles which bind members in the educational group.

Every Teacher Needs Stimulation

His work must reflect the activities of a large number of his teachers. He must produce growth, not merely pass theory on. He mustn't merely do things himself, but get things done.

(Concluded on Page 146)

¹Read before the Department of Elementary-School Principals, of the National Education Association. Dallas, Texas, February, 1927. A reprint from the Department's Report.



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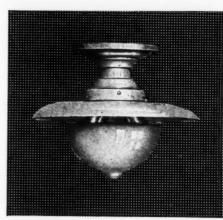
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Hundreds of grade schools, high schools, and colleges have installed Denzar to light their classrooms, study rooms, gymnasiums, laboratories, manual training and domestic science rooms, auditoriums, and offices. Contact with so many of these installations has given Beardslee engineers a wide experience in school illumination and has made available a wealth of information on the subject. Any school board, superintendent, architect, or electrical contractor interested in better school lighting may have this information for the asking.



School-District Meetings

The county superintendent of schools may be discharged by the county board of education in accordance with the Ohio statute (Gen. Code, § 7701) .-Christmann v. Coleman, 157 Northeastern Reporter,

A county board of education cannot dismiss a county superintendent of schools arbitrarily (Ohio Gen. Code, § 7701).—Christmann v. Coleman, 157

Northeastern Reporter, 482, Ohio.

The county superintendent of schools may justify retention of office in quo warranto by proving dis missal before the expiration of the term was arbitrarily made (Ohio Gen. Code, § 7701).—Christmann v. Coleman, 157 Northeastern Reporter, 482,

The county superintendent of schools may justify retention of office in quo warranto by proving that his dismissal was the result of fraud and collusion by the board of education (Ohio Gen. Code, § 7701). -Christmann v. Coleman, 157 Northeastern Reporter, 482, Ohio.

The city superintendent of schools and the board of education could rescind an existing contract of employment by mutual consent.—Stewart v. Eaves, 257 Pacific Reporter, 917, Calif. App.

Permitting a board of education to accept resignation of the city superintendent of schools does not nullify a statute providing that he shall be elected for a term of four years (Calif. Pol. Code, § 1793).—Stewart v. Eaves, 257 Pacific Reporter, 917, Calif. App.

As regards fixing of compensation, the city superintendents of schools are employees, not "public officers" (Calif. Pol. Code, §§ 1609, 1793, subsec. 2). -Stewart v. Eaves, 257 Pacific Reporter, 917, Calif.

A tax, district cannot levy taxes for a school building without specific legislative authorization. -Board of Com'rs of McDowell county v. Hanchett Bond Co., 138 Southeastern Reporter, 614, N. C.

A school taxpayer may bring suit to prevent the taking of property for taxes by void proceedings

under an act of the legislature void on its face (Sp. Acts 39th Leg. [1925] c. 214).—Burns v. Dilley County Line Independent School Dist., 295 Southwestern Reporter, 1091, reversing judgment (Civ. App.), Dilley County Line Independent School Dist. v. Burns, 290 Southwestern Reporter, 279, Tex. Com. App.

School-District Claims

An audit of claims by the board of education is a quasi-judicial proceeding.—Associated Buffalo Architects v. Board of Education of City of Buffalo, 223 New York State Reporter, 241, N. Y. App. Div.

A petitioner must be given notice of the time and the place of hearing on claims by the board of education, and an opportunity to present claims.—Associated Buffalo Architects v. Board of Education of City of Buffalo. 223 New York State Reporter, 241, N. Y. App. Div.

Pupils

The county superintendent's telephonic directions and written statements held "approval," making a community school district liable for the tuition of pupils attending the city school (Kans. Rev. St. 72-2501, 72-2505).—Board of Education of City of Hutchinson v. Reno Community High School, 257 Pacific Reporter, 957, 124 Kansas Reporter, 175, Kansas

Whether the health of the child was such that she might attend school is held an issue of fact in a prosecution of the parent for failing to send the child to school, with the burden on the state to establish guilt (Ohio Gen. Code, § 12974).—Parr v. State, 157 Northeastern Reporter, 555, Ohio.

LAW AND LEGISLATION

—Whether any state can prevent children of other than those of the Caucasian race to attend the public schools provided for white children is to be determined by the United States Supreme Court. The controversy reached the court case from the Rosedale school district in Bolivar county. Miss., where the school authorities required a child of Chinese descent to attend a public school provided for Negroes. It was submitted for decision without oral arguments. Counsel representing Martha Lum, daughter of Gong Lum, an American citizen of Chinese descent, contended in a brief that the child had been unlawfully excluded from a white public school. Counsel for the school authorities insisted in his brief that state laws for the segregation of children by races in the public schools were valid and that a child of Chinese parents must go to one provided for Negro

-An opinion rendered by the attorney general of Oklahoma, is to the effect that the law of the state provides only for the education of persons from 6 to 21 years of age. This excludes from night schools more than 10,000 adults who have been taking vocational studies.

—The school budget of Battle Creek, Mich., has been cut \$200,000 by the county board of supervisors. The school authorities question the right of the county board to thus curtail the figures of the board of education and it is believed that the question will be tested by the courts. The mayor is against the board of education and holds that the question should be submitted to a vote of the people.

—In a recent decision in the case of Scaut v.

Joint School Dist. No. 6, of the Town of Lena and Little River, the Wisconsin Supreme Court has made some pertinent observations relative to the necessity of a transportation contract in writing.

The court comments as follows:
"The statute provides that the contract 'must'
be in writing. We do not know what led the legisbe in writing. We do not know and lature to use this imperative language. It could lature to use this imperative language. No doubt difficulties of administration in cases where contracts were not in writing led to its adoption. It may be that the result of cases such as this one, where the parent has made a good-faith attempt to bring about the execution of a proper contract, which effort the board rendered abortive, were not foreseen. If the statute operates in a harsh and unreasonable manner, the remedy lies in an appeal to the legislature."

The decision was based on the transportation law as it existed prior to the legislative session of 1927. A later session modified the language of the statutes with reference to the necessity of a written contract for transportation, but as the language now stands, it is capable of more than one inter-pretation with respect to the matter. In order to be on the safe side, it is urged by the state education department that all parties having transporta-tion accounts with the school board either as parent or guardian, or as an employee of the district, enter into a written contract with the school board prior to the beginning of the transportation program.

BONDED FLOORS in the John Burroughs School-





In Wellesley's Newest Lecture Hall-

Non-Slip Steps of Alundum Tile

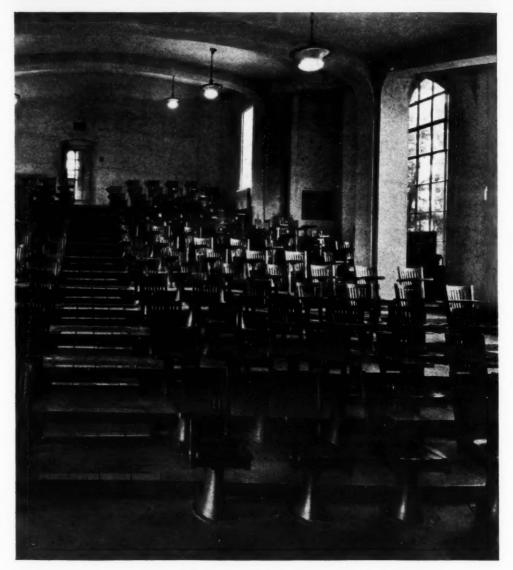
R-r-r-r-ing goes the closing bell. The girls swarm from their seats. They pour down the aisles. And the hustling feet are protected against slipping, for each step in the lecture hall of the new Botany Building has a nosing of Alundum Stair Tile.

Not only is this tile permanently non-slip but flat, without grooves or corrugations to catch heels. And because of the exceptional durability of Alundum Tile worn hollows will not appear under the heaviest and most concentrated traffic.

NORTON COMPANY Worcester, Mass.



T-200



Botany Building, Wellesley College — Day & Klauder, Architects, Philadelphia

FIRE PREVENTION IN ONE-ROOM SCHOOLS IN WEST VIRGINIA

Mr. George E. Hubbs of the state education department of West Virginia is cooperating with State Fire Marshal C. W. Nolte, in his efforts to have the schools put in safe condition. Mr. Hubbs is directing his efforts to making all school buildings as fire-resistive as possible, and to this end recommends that no new buildings of the one-room type be erected without giving due consideration to fire safety.

Mr. Hubbs in the direction of fire prevention has prepared plans for a one-room school which

has prepared plans for a one-room school which embody safety ideas. The important features are a concrete base for the stove; slate shingles for the roof, with terra cotta lining for the flues; steel

sash windows; cement wainscoting, and plaster for ceiling and walls.

In the construction of one-room schools, Mr. In the construction of one-room schools, Mr. Hubbs suggests brick or tile for building material. While a brick school would cost twice as much as a wooden one, it would be cheaper in the long run, and the difference in cost is made up by the improved appearance of the building and the lower cost of insurance and diminished danger from fire. It is expected that brick schools will be more generally erected when it is shown that these schools endure for a much longer time than the

schools endure for a much longer time than the flimsy wooden structures formerly in use. Added to this, there is less danger of destruction by fire, and the building presents a substantial and dig-nified appearance to the passerby.

NEW BUILDING POLICY AT BRIDGEPORT, CONNECTICUT

Business Manager John B. Wynkoop of the board Connecticut, has proof education at Bridgeport, posed changes in the school-building policy of the board which are intended to bring about economies in building construction.

Under the proposed plan, Mr. Wynkoop asks for an amendment of the board's rules permitting the business manager to examine all drawings and specifications during the course of construction and to call the board's attention to any matters in need of attention. Some school buildings are built economically, while others are erected at extrava-

Another recommendation is that an architect be school, instead of afterwards. School-building construction would be accelerated with the operation of three eight-hour shifts each day.

A recommendation was made that the five largest schools in the system be changed from coal-burning to oil-burning heating systems.

BIDS REQUIRED FOR NEW JERSEY

SCHOOL BUILDINGS

—The attention of boards of education in New
Jersey has been called to the provisions of chapter
95, of the public laws of 1915, which, with its requirements governing public buildings, have been construed by the attorney general to apply to school buildings.

The law provides that "in the preparation of plans and specifications for the erection, construc-tion, alteration, or repair of any public building in the state, whether erected, altered, or repaired by the state, where the cost of such work exceeds one thousand dollars in amount, it shall be the duty of the architect, engineer, or other person preparing plans and specifications, to prepare sep arate plans and specifications for the plumbing and gasfitting, and all work allied thereto, and of the steam and hot-water heating and ventilating apparatus, steam power plants and allied work, and electrical work. It shall be the duty of the board or body, person or persons authorized by law to award contracts for the erection, construction, alteration, or repair of any public building, to advertise for in the manner provided by law and to vertise for, in the manner provided by law, and to receive separate bids for each branch of the work, and to award contracts for the same to the lowest responsible bidder for each of the branches re-

spectively."
While the law is applicable to school-building construction, alteration, and repairwork in all it does not eal another tion of the school law which requires that boards of education advertise for bids in construction and repairwork costing over \$500.

BUILDING CONSTRUCTION ACTIVITIES

IN MILWAUKEE
The school-building fund of the Milwaukee, Wisconsin, schools is in a satisfactory condition for

the reason that building activities and the placing of contracts for additional buildings and purchase of contracts for additional buildings and purchase of sites has caught up and passed the funds available for building purposes. For only three years since 1917 has the amount devoted to building contracts equaled or exceeded the construction-fund balance, which was largely due to the fact that building-fund bonds had not been sold.

In September, the cash on hand in the building fund, including bonds unsold, amounted to \$1,215,-816, against, which there was reserved for contracts

816, against which there was reserved for contracts awarded \$1,413,885, a difference of \$198,069. It is expected that additional funds will be made available next year before the entire amount reserved for contracts is paid out.

Before the end of the year it is planned to award contracts for the Vieau school, the Walker Junior High School, and part of the Lincoln High School, estimated at \$1,074,213.

In the matter of repairs to buildings, the board has established a program for the installation of modern lighting facilities and the improvement of modern lighting facilities and the improvement of toilet facilities in the older school buildings. The next step along this line will be the furnishing of proper lavatory facilities in the older schools where such facilities were not previously installed. Recently-built schools are provided with lavatory facilities, but conditions in some of the older schools are far from ideal.

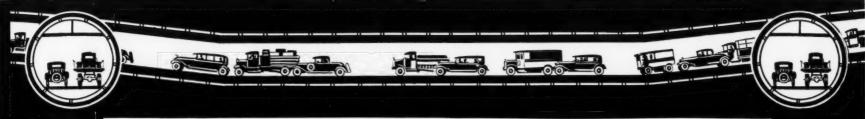
STANDARDIZING RURAL SCHOOLS

—The U. S. Bureau of Education has recently given out information showing that a total of 31 given out information showing that a total of 31 state departments of education are promoting standardization of rural schools, by authority of the statutes, or by rules and regulations of the chief executive school heads. In a few other states, county superintendents are promoting a plan of standardization within their respective counties. In some of the 31 states, standardization applies to small rural schools, especially those of the one-

to small rural schools, especially those of the one-teacher type. In others, it includes all rural schools —graded and consolidated, as well as ungraded. It is, however, with the small rural schools, particularly those where consolidation is not feasible, that standardization is most concerned.

Among the requirements relating to standardization which have been written into the statutes or adopted by regulations of state school executives,

(Continued on Page 74)







Sturtevant's Engineering Contribution to this gigantic accomplishment ~ ~ ~

BUILT at a cost of \$48,000,000, and now completed after seven years of labor, The Holland Vehicular Tunnels, dipping deep under the Hudson River and linking New York and New Jersey, aptly have been called "the eighth wonder of the world".

9,250 feet long, accommodating 46,000 vehicles a day, these tunnels presented a ventilating problem without precedent. With thousands of cars discharging smoke, fumes and lethal carbon monoxide gas—with the ever-present danger of a car catching afire—with the safety of thousands in the balance every day—how could absolute safety be assured? This was the question that had to be answered.

To cooperate with the tunnel engineers in solving this problem has been Sturtevant's privilege from the very beginning. In the Sturtevant Research Laboratory many perplexing questions were settled. Here, and throughout the many months of planning and construction, Sturtevant was given the opportunity to bring into play its many years of engineering experience.

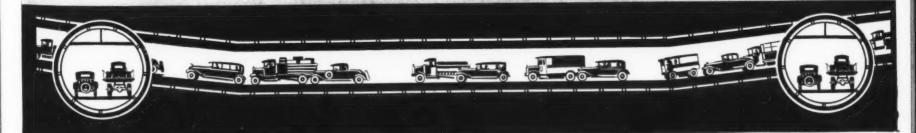
The 84 Sturtevant Blowers and Exhausters that keep the tunnel air safe and pure tell another story of engineering achievement. These giant fans are capable of handling 1400 tons of air per minute and effect in each tube 42 changes of air per hour. Sturtevant in winning the order for these fans not only met the exacting specifications but, in addition, met them with a power consumption 15% less than that required by its nearest competitor!

B. F. Sturtevant Company, Hyde Park, Boston, Mass.

Hyde Park, Mass. Framingham, Mass. Camden, N. J. Sturtevant, Wisc. Berkley, Calif. Galt, Ontario Branch Offices in Principal Cities

Sturievant

VENTILATING, HEATING, AND POWER PLANT EQUIPMENT





(Continued from Page 72)

1. The school site must be well drained, level, fertile, and must contain at least two acres of

2. The building must comply with accepted standards relating to number of rooms and dimensions, color schemes for walls, replacement of glass area of windows, heating and ventilation, and amount and kind of equipment.

3. The minimum scholastic preparation of the

teacher is completion of four years of high school, plus a two-year normal course, and two years of successful teaching.

4. The school term must be nine months; the average daily attendance must be at least 90 per cent of the enrollment and the enrollment must be 90 per cent of the educables of the district. There should be a well-planned daily program.

—The city council at Pleasantville, N. J., has passed a bill authorizing a bond issue of \$635,000 for the construction of a new high school. The high school will contain 32 classrooms and will

be erected in one of the best sections of the city.

—Mayfield, Ky. An eleven-room grade school has been erected, at a cost of \$40,000.

—The New York State College for Teachers has given new names to its buildings. The administra-tion building will be known as Draper Hall in honor of Dr. Andrew S. Draper. The library will be known as Gideon Hawley Library. The science building will be known as Huested Hall in honor of Albert M. Huested. The Milne High School will be known as Milne Hall in honor of Dr. William J. Milne. The center of the three new buildings will be known as David Page Hall, in honor of the first principal of the school.

-Under a new rule of the board of education of New York City, elementary schools will no longer be given distinctive names, but will be officially known by numbers only. In the future, names will be assigned to junior and senior high schools, the training schools, and continuation schools. Schools which have received names will retain their titles, but no new ones will be given

—The second step in the educational program of Alabama has been taken with the submission of a proposed bond amendment to the legislature. The school-bond amendment is sought in order that the state department may aid the counties in the construction of permanent buildings, and in order that

the normal schools and higher institutions of learning may have their building requirements met. Of the proposed \$20,000,000 bond issue, it is proposed that each county shall receive \$200,000, and that the boards of education of each county and city shall determine the distribution of the funds as provided by the law.

—Storm Lake, Iowa. The school board has employed Messrs. Keffer & Jones of Des Moines, to make a survey of the school plant. The survey will cover the present condition of the school build-ings and enrollment, and will include recommendations as to needed future buildings.

-The school board of Raritan township, New Jersey, has adopted a ten-year program of building construction. The program is the result of a sur-vey made last summer under the direction of the state commissioner of education. The program calls

for the immediate erection of two buildings, and the erection of three further buildings in 1935.

—Jonesboro, Ga. The school district recently sold \$20,000 worth of school bonds, at a premium of \$380. The proceeds of the bonds will be used in the erection of a new grammar school. —Atlanta, Ga. Plans and specifications have

been completed for five new buildings to be erected in the near future. The plans are the work of Mr. G. L. Preacher, architect, Atlanta.

—As a result of the damages to school buildings by the recent tornado, the school board of St. Louis, Mo., has taken up the problem of school-building insurance.

The school board has followed the policy of setting aside each year the money that normally would be paid for insurance. This fund now totals be-tween \$85,000 and \$90,000. There are 137 buildings comprising the St. Louis school plant, which would make the cost of placing tornado insurance almost prohibitive. In the matter of fire insurance, it is shown that most of the buildings are fireproof.

Beaumont, Tex. A bond issue of \$1,500,000 for a high school and additions to other buildings has been recommended to the city commission by the board of education. It is expected that the major part of the bond issue will be used for the con-

struction of the high school.

—The local fire chief at Beaumont, Tex., recently made a report on fire hazards to the chairman of the building-and-grounds committee of the board of education. Among the changes recommended are the purchase of new fire hose where needed.

the installation of panic bolts on exit doors, the installation of metal ceilings in boiler rooms having wooden ceilings, the installation of fireproof doors for the high school, the purchase of 113 new fire extinguishers, and the instruction of janitors in the use of fire extinguishers and in sending in an

alarm of fire to department headquarters.

—Hobart, Ind. A building program of \$1,000,000, the first unit of which will cost \$200,000, was begun this fall. Messrs. Wainwright, Vaughn & Company, architects, have completed plans for the administration building which is to be completed and occupied with the opening of the fall term in

—Bond issues totaling \$1,355,000 were voted upon by four county school districts and six townships of Montgomery county, Ohio, at the recent November election. In Van Buren the citizens voted upon a bond issue of \$500,000 for a new school, while in Madriver township the board asked for \$12,5000 for the subargement of three school \$125,000 for the enlargement of three school buildings.

—Pittsburg, Calif. Plans have recently been completed for a high school to be built out of the \$225,000 bond issue voted by the district. The building will be in the Tudor Gothic style of architecture. Mr. Walter T. Helms is the architect.

—In Fresno, Calif., recent building additions to

the schools have been completed at a cost of over \$100,000, exclusive of the Edison School addition, which cost \$190,000.

—Gridley, Calif. Bids for the construction of a new high-school plant have been rejected and

new bids will be received.

—Beaumont, Calif. A bond issue of \$75,000 has been proposed for a new high school.

—Merced, Calif. The Galen Clark Grammar

School has erected a \$25,000 addition, to provide accommodations for the increased enrollment of the present school year.

—The Shasta county high school at Redding,

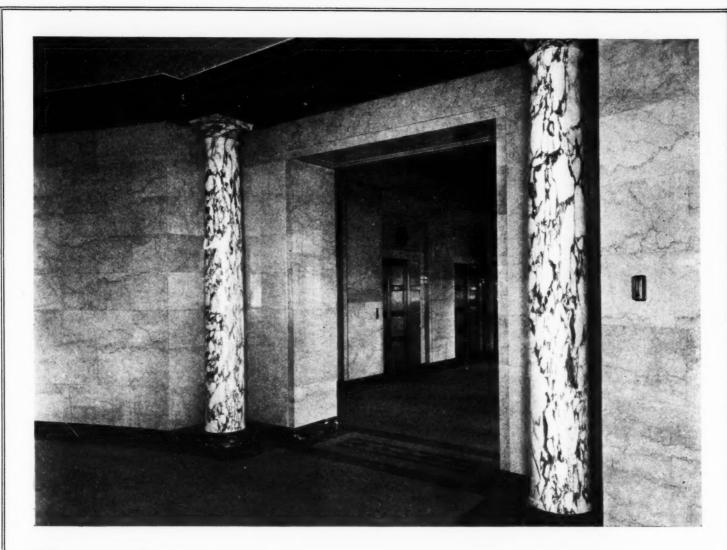
Calif., opened the fall session in a new building costing \$125,000.

—A union high-school building for the Monrovia-Arcadia-Duarte school district, costing \$500,000, has been planned. The building will be erected from plans prepared by Austin & Ashley, architects.

-The union high-school district at St. Helena, Calif., is planning a bond issue to enlarge the present school building.

(Continued on Page 77)

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Proof---

That MARBLE is a more beautiful material for the interior finish of buildings—that it is more distinctive, durable and sanitary—that it is ultimately more economical from every standpoint—and, finally, that

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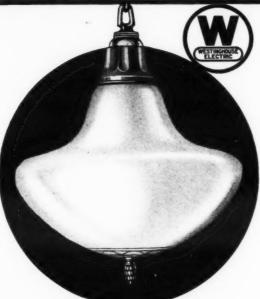
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Better Vision



Better Lessons

GOOD light on dark days means better vision, and better vision means better lessons. That is why leading school authorities throughout the country are turning their attention toward the lighting problem—and Sol-Lux Luminaires.

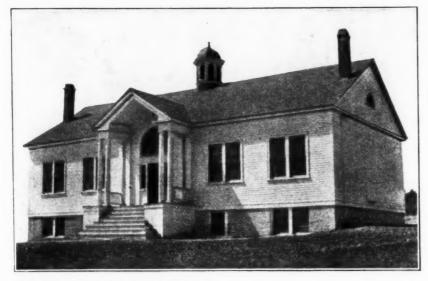
In school cafeterias, class rooms, corridors, and study halls—any place where children's eyes are put to test day after day—good light is needed. Young eyes must be given ample light to avoid strain, diffused light to protect them against glare.

In designing Sol-Lux Luminaires, engineers had in mind two things; ample light—light that reaches every corner of the room, and yet glareless light—light that does not strain the eyes. The special diffusing glass in Sol-Lux Luminaires takes the glare from the lamp and absorbs only a limited amount of light.

Lighting specialists at our nearest district office are at your service at any time. Write or phone today.

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FERALUN Anti-Slip Treads

are adaptable for any type of school building. One-story rural schools-as shown above-consolidated schools, private and public schools, high schools and colleges, all need stair tread protection against slipping and tripping.

Where Danger Lurks on the Very Doorstep

Exposed to the elements day after day and used by everyone entering and leaving the building, entrance steps are a vicious hazard unless safety is built into them.

All ordinary tread materials are slippery in bad weather and wooden treads soon become weak and unsafe from exposure.

FERALUN Style "S" Treads are especially made for schools where foot traffic is heavier than in any other type of public building and the two main features of these Treads-Safety and Durability-make their installation one of the safest and soundest investments possible.

School boards cannot afford to take chances on injuries to students or teachers as the law holds them responsible when stairways are unprotected.

We will be pleased to mail detail sheets and samples of FERALUN Treads to any school official or architect upon request.

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50 Church Street, New York

BOSTON 136 Federal Street

PHILADELPHIA 1700 Walnut Street

CHICAGO Conway Building

BUFFALO Erie County Bank Building

PITTSBURGH Farmers Bank Building

SAN FRANCISCO 444 Market Street

(Continued from Page 74)

—A modern school in Spanish design has recently been completed at Palm Springs, Calif.
 —A school costing \$56,000 is being erected at

Tupman in Kern county, Calif.

—Philadelphia, Pa. The school board has named two new buildings for the late Woodrow Wilson and Jules E. Mastbaum.

—Chicago, Ill. Forty new school buildings are needed for the schools, according to Mr. J. Lewis Coath, president of the board. There is at present

a shortage of 653 rooms, or 30,038 seats.

—The school board of West Deptford, Nebr., held a meeting to outline schools and bond issues for schools to be presented for action. A bond election will be held when the voters will be asked to appropriation of \$350,000 for new

to approve the appropriation of \$350,000 for new buildings and the purchase of sites.

—The construction of new high schools in the outlying sections of Syracuse, N. Y., has been recommended by John A. Gee, superintendent of school buildings. school buildings.

—The school board of Waukegan, Ill., has named the new athletic field the William F. Weiss Field. Mr. Weiss was a member of the school board and was largely responsible for the completion of the new field

-Lincoln, Nebr. The school board has adopted a recommendation providing for a perpetual inventory of furniture and equipment of the schools. Under the new plan, there will be three main divisions in the stores department, namely, the new equipment and supplies, the used equipment in storage, and the operation and maintenance depart-ment. There will be an actual division of the department, as well as a card record of each item. An inventory clerk will be employed as supervisor of the work, with perhaps a clerical assistant.

—Prof. W. C. Bagley and Prof. E. S. Evenden of Columbia University, New York, have been employed to make a survey of the administrative methods at Harris Teachers' College, Sumner Teachers' College, and Sumner High School. Dr. David C. Todd, Mrs. Elias Michael, and Mr. Arthur Blumeyer comprise a special committee appointed to take part in the survey. An appropriation of \$3,000 has been made to cover the cost of the

-New Orleans, La. The Orleans parish school board has adopted a recommendation providing for the issuance of \$10,000,000 in bonds for the pur-

chase of sites, construction, and repair of school

buildings.

-Spring City, Pa. The school board has called a bond election to vote \$100,000 in bonds for a new

high school.

-Chicago, Ill. Tentative plans for the erection of a twenty-story building on the site of the Chicago Public Library, to house both the library and the administration offices of the board of educa-tion, have been announced by President J. L. Coath of the board of education.

Under the plan, the present library building will be left intact, and the sixteen additional stories, with setbacks, will be superimposed on the old structure. The work is to be completed at a cost of \$10,000,000. The entire financing of the work will be in charge of the board of education.

—Kenmore, Ohio. The school board has asked the vectors to emprove a bond issue of \$160,000 for

the voters to approve a bond issue of \$160,000 for the purchase of sites and the erection of new buildings.

The school board of Hamilton, Ohio, has called bond election to vote \$1,500,000 in bonds for a

three to five-year building program.

—Neenah, Wis. The new building program of the board of education is expected to reach a total expenditure of \$650,000.

—Indianapolis, Ind. The new grade-school building program for 1927-28 will involve a total expenditure of \$1,250,000, according to a report of the school commissioner. A total of twelve schools are listed in the report of buildings to be erected during the school year.

—Greenville, Ala. The school board has given the name of Walter O. Parmer to the local grammar school. Mr. Parmer, a former resident of Greenville, has made a gift of half a million dollars, which will be held in trust by five Greenville citizens. The income of the fund will be used for the education of fifteen boys in Butler county and one from each county bordering on the county, making a total of twenty young men who may be educated through the fund. The Parmer School, which was with appropriate exercises.

BUILDING NEWS

Plans have been completed and bids are being received on the new Fairmont School at Fairmont, W. Va. The school is being erected from plans prepared by Mr. Wm. B. Ittner and will cost \$950,000.

-The new Hickman High School at Columbia, Missouri, was completed in October. The building is located on a forty-acre site and has accommodations for 1200 students. Wm. B. Ittner, architect.

—At Lancaster, Pa., plans are under way for a building program to include an elementary school and additions to two junior high schools. The estimated cost of these buildings is \$953,000. B. Ittner, architect.

-Plans have been prepared for the Northeastern Junior High School at Battle Creek, Mich. The building will be erected at a cost of \$600,000. Wm. B. Ittner, architect

—The junior high school at Ann Arbor, Mich., will be erected at a cost of \$500,000. Wm. B. Ittner, architect.

-Public-school interests in the flooded region of Louisiana have apparently suffered less than was at first anticipated. It is expected that the state legislature will make provision against loss in school funds, and important contributions from private sources will go toward the rehabilitation of school property in the parishes which suffered from the flood.

—The board of superintendents of New York City has approved a recommendation of the building committee for the revision of the plans for the new Childs High School, to be erected in Bronx Borough. The new plans will be a modification of the plans of the Roosevelt High School now nearing completion. The change was made to make the building conform to the shape of the lot.

—Reading Pa Complying with the recomment

Reading, Pa. Complying with the recommendations in the survey by the Pennsylvania State Education Department in 1923, the board of education has vacated and sold a number of school buildings erected a number of years ago. Six school buildings no longer used have been sold and six others have been vacated and will be sold. With the completion of a new 32-room grade school in August, 1928, three other buildings will be abandoned and sold. When the present building program has been completed, a total of 26 buildings in use in 1923 will have been vacated or sold.

The present inadequate supply building of the

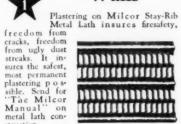
board of education has been sold, and a new supply building and workshop will be provided in the re-modeled Popular Street school building.

-"Extravagance in the building of schoolhouses is a fine text for those who oppose the extension and development of public education," says the Wisconsin Journal of Education. "Perhaps there



Walls

netal lath con-





Ceilings

Milcor "Invisible Joint" Metal Ceilings are popular for school buildings because of their permanence, economy, safety (can'e burn, crack, or fall off), and because of their beauty and sani-tary advantages. Easily cleaned or refinished Send for Metal Ceil-ing Catalog.



Corners

Catalog

All outer, exposed corners and all inner corners and ceiling angles should be protected by Milcor "Expansion" Corner Beads (Pat'd.). They protect the corner and the adjoining walls against cracking and insure precisely straight corners. See "The Milcor Manual".



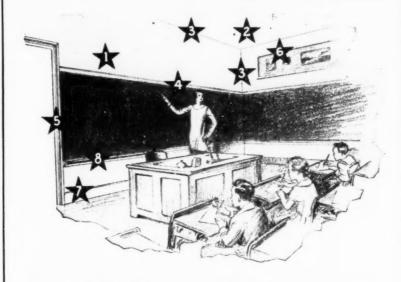


Metal Trim

This special Milcor "Expansion"
Casing (Pat'd.) was developed principally as a metal trim for plastering around blackboards, panels, etc. It can also be used for door w trim, eliminating wooden trim.



and window trim, eliminating wooden trim. See "The Milcor Manual".



At Vulnerable points insure permanence and safety with

SHEET METAL PRODUCTS

MILWAUKEE CORRUGATING CO., MILWAUKEE, WIS. CHICAGO, ILL. KANSAS CITY, MO. LA CROSSE, WISC. BOSTON, MASS.



Casings

for Doors and Windows



Milcor "Expansion" Casings (Pat'd.) for door and window trim, climinate expensive, clumsy, unsanitary wooden trim and help to make the school room more firesafe, more sanitary, neater and more pleasing in appearance. See "The Milcor Manual".



Panel Trim

For special panels this solid met-al Milcor trim is very desirable.

It a d ds
m u c h t o
t h e finishe
e d appear
ance of the
room because of its neat and simple design.
It is sturdy—will outlast the building—and
is easily kept clean. See "The Milcor
Manual".



Base Screed





Chalk Troughs

These Milcor Metal Chalk Troughs should be installed in

every school.
Whether it be a new building or an old one

modeled, see that it has Milcor Metal Chalk Troughs. Details in "The Milcor Manual".

Other Mileor Products for schools include Ventilators, Skylights, Furnace Fittings, Met-al Roofing, etc. Write for Catalogs—FREE.

is some waste, some lavishness here and there, but the truth is that there are still more disgracefully bad school buildings than luxurious more unhygienic, dangerous, overcrowded build-ings than artistic monuments to civic pride. For instance, in 257 of the larger cities of the country the total expenditure for school buildings was 4.8 per cent of the total amount of the building expenditures. Garages and filling stations accounted for 5.1 per cent.

—The new gymnas um-and-auditorium addition to the Fulton-Avenue School, Evansville, Ind, will be named after Floyd C. Ragland who served the school as principal for eleven years. He died last

TO STUDY AIR LEAKAGE IN BUILDINGS

How much air leaks into buildings by infiltration through various types of walls and through the small crevices about windows and doors will be studied by members of the staff of the steam and gas engineering department of the University of Wisconsin College of Engineering. The tests will be carried on under the direction of Prof. G. L. Larson and will be handled under a cooperative arrangement with the American Society of Heating and Ventilating Engineers. Professor Larson is a member of the officers' committee on infiltration and is engaged with another committee of the Society in preparing a code for testing insulation of building

SCHOOLHOUSE DEDICATIONS

—Thomas H. Harris, state superintendent of Louisiana, was the principal speaker at the dedication of the new school at Doyline, La. Mr. Harris has been state superintendent since 1908.

—The speakers at the dedication of the new school at Silver Lake, Ohio, were Dean Fred Ayer of Akron, Charles A. Flickeringer, county superintendent, and J. J. Wads, president of the board of education.

-The new \$200,000 high school at Vermillion, Ohio, was opened with appropriate ceremonies. State Superintendent J. L. Clifton was the principal

-Two new schools, the Wilbur Wright and the George A. Wogaman, were dedicated at Dayton, Ohio, recently. President H. B. Millhoff of the board of education appointed committees to take charge of the ceremonies.

The committee in charge of the Wilbur Wright dedication is Mrs. McDaniel Howsare, Mrs. Wini-

fred A. Whitmer, W. F. Kramer, board of education members, and Paul C. Stetson, superintendent of instruction; John W. Graham, board of education business manager, and Jawy W. Holmes, principal of the school. Mrs. G. A. Roussel, Carl A. Myers, and Luther Cline, board members; Mr. Graham, Mr. Stetson, and Miss Emma L. Hommel, principal of the Wogaman School, comprise the committee for the George A. Wogaman school dedication.

The dedicatory ceremonies of the Emily Howland High School at Sherwood, N. Y., enjoyed the novelty of an address by Emily Howland, in whose honor the school was named, and who has reached the age of 100 years. She served as a teacher for

many years.
—The \$60,000 addition to the Johnson Creek, Wis., school, was dedicated with a program of music, song, and oratory. Principal W. J. Hall presided. The speakers were A. J. Thorne, county superintendent, Supt. Buell of Waterloo, and Supt. McInnis of Jefferson.

-The new Centralized school in Decatur township, Lancaster county, Ohio, was opened with addresses by Principal Kendal Conley, R. T. Lawson, county superintendent, and Supt. W. C. Paul.

—Dr. William M. Davidson, superintendent of the Pittsburgh, Pa., schools, delivered the dedica-tory address at the opening of the new Mount Logan school at Chillicothe, Ohio. An invitation was issued to the citizens by President Wm. H. Herrn-stein, vice-president Wm. H. Kettra, H. V. Hop-kins, P. K. Rice, and S. M. Veail of the board of education. education.

-A. G. Yawberg, county superintendent, was the chief speaker at the dedication of the new school at Olmsted Falls, Cuyahoga county, Ohio.

FAMOUS SCHOOL-FIRE DISASTERS

The National Fire Protection Association calls attention to six school fires within the past two decades which resulted in 353 deaths. The Lake-view school at Collinwood, a suburb of Cleveland, was destroyed between the forenoon hours of ten and eleven o'clock on March 4, 1908. Two teach ers and 173 children were killed.

St. John's parochial school at Peabody, Mass., was destroyed October 28, 1915. The fire broke out at 8:30 in the forenoon. Twenty-one children were lost. St. Boniface College, Manitoba, was burned during the night. Nine students were killed. The Cleveland school fire, at Camden, S. Car., occurred during an entertainment on the evening of May 17, 1923. Seventy-seven persons were killed.

The Hope Development School at Plaza del Rey, Calif., was destroyed by fire during the night of May 31, 1924. The matron and 23 girls lost their lives. The rural school located at Babbs Switch near Hobart, Okla., was burned on Christmas Eve of 1924. In all 36 people were killed. Of these 18 were children. Other schoolhouse fires are as

High Schools

Northside High School, Minneapolis, Minn., June 18, 1913. Two firemen killed by falling walls.

High school, Wheeling, W. Va., January 3, 1914.

Two volunteer firemen killed by falling walls.

Deering High School, Portland, Me., May 21, 1921. Fire captain killed by falling wall.

High school, Marlboro, Mass., June 22, 1922.

Girl burned to death when sparkler ignited her

clothing. Washington High School, Portland, Oreg., October

25, 1922. Fireman killed by falling wall.
English High School, Lynn, Mass., March 29,
1924. Fireman killed by falling beam.
High school, University City, Mo., September 21,
1926. Workman killed when solvents of a plastic floor covering exploded.

Elementary Schools

Hochelaga School, Montreal, P. Q., February 26, 207. Teacher and 9 children trapped in building and burned to death.

Public school, Monterey, Ind., December 27, 1907. The explosion of a gasoline lamp ignited the clothing of 2 little girls, who were burned to death.

Negro school, Asheville, N. Car., November 16,

1917. Seven children who reentered building to save clothing burned to death.

High Point Community School, Covington, Ga., November 28, 1922. Two of pupils trapped on second floor were burned to death.

The latest schoolhouse calamity is that of Bernardsville, N. J., where a school dormitory was destroyed by fire on November 8, 1927, killing one teacher and three pupils.

In each instance, the National Fire Protection Association reports, the calamity was due to a lack of ready exits, faulty stairways, and defective heating apparatus. Timely precaution against fire hazards should become the concern of school administrators everywhere.



New PeerVent Unit with front plate removed, showing improved fan housings (1), new position of air filter (2) under the fans, and the highly efficient new radiator (3).

Improved Details

All heating and ventilating units are similar in their operating principles. The differences are in details — motors, fans, radiators, dampers, and controls. The new PeerVent Unit, announced in these pages last month, has valuable improvements in *all* of these details.

The earlier Peerless and PeerVent Units were perfectly satisfactory to users. They have been sold in large numbers for nearly fifteen years. But the new unit is even better, and we urge everyone interested in heating and ventilating apparatus to send for the new PeerVent Catalogue.

NEW A.C. MOTOR. The new PeerVent Unit can be equipped with a special A.C. motor, as quiet in operation as a D.C. motor, for either single or polyphase current. This improvement

is the final step in placing the unit system on a strictly unit basis. It makes it possible to operate a single unit after hours as economically per unit of service as though the whole system were operating. The motor-generator outfit is eliminated, which means lower first cost and less operating expense.

Write for the new PeerVent Catalogue now while you have it in mind, or ask your architect to send blueprints for a proposal and estimate. On request, we will gladly send our local representative.

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THEY OUTLAST IN WEAR AND BEAUT

"Tontine " "

Satisfactory in every way"

Sewickley High School

Sewickley, Pa.



"The Tontine shades placed in our building have been satisfactory in every way," writes Mr. L. H. Conway, Principal. "After one year's service, they are still in very good condition. There has been no need to question the durability of the shades."

-careless students-rough handling-ruin ordi-Open windows-

There's just one shade they cannot harm-a shade that's proof

against hard usage and the weather. That shade is Du Pont Tontine — made by a wholly new and different process.

Tontine contains no filler to fall out. It is pyroxylin impreg-

nated. Cannot crack or "pinhole." Waterproof—storms and rains can't harm it.

And washable-kept fresh as new, season after season, by scrubbing with soap, hot or cold water, and a brush.

Tontine cuts the upkeep budget. It obviates the need of costly shade replacement. Write for samples now.

E. I. DU PONT DE NEMOURS & CO., Inc.

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New Toronto, Ontario, Canada



WINDOW SHADE

DU PONT OBSERVES A CENTURY AND A QUARTER OF USEFULNESS TO THE AMERICAN PEOPLE.

WASHINGTON CORRESPONDENCE A. C. Monahan, formerly U.S. Bureau of Education

Public-School Teachers' Pensions

Thirty states have state pension systems for teachers, according to a recent study by the U. S. Bureau of Education. New Jersey, which established its system in 1896, was the first state to provide financial aid to retired teachers of the public-school system. Local city and county pen-sion systems are of an earlier date than the New Jersey State system, but the total number of such locals was only 13 at that time, and approximately 50 at the present. An additional 40 have been in existence but have been absorbed by state systems

as these have been created by the state legislatures.

Pension systems are designated as "free," "wholly contributory," and "partly contributory." In the first or "free" system, the funds for the pensions are taken entirely from public funds. In the "contributory," systems, teachers contribute a portion of tributory" systems, teachers contribute a portion of their salary to the fund throughout their years of service. In the "partly contributory" system the teachers' contributions are increased by public monies appropriated for this special purpose.

The partly contributory system is preferred, constituting approximately two thirds of all systems, with the other third divided about case.

with the other third divided about equally between the "free" and "wholly contributory." It is worthy of note that practically all recently-established systems have been of the "partly contributory" type.

The contributory systems as a rule are voluntary for teachers in service when the law became operative, and compulsory on new teachers. The favored method of assessments on the teachers is a percentage of the salary. This percentage varies from 1 to 7, the average being approximately $4\frac{1}{2}$.

In certain systems, retired teachers receive a flat sum for a pension, the amount varying from \$200 to \$900 per year, sometimes graduated according to length of service and sometimes not. The more common system is a sum depending upon the salary of the teacher, either the final salary or the average salary of the last 5 years of service. One half the salary is the usual amount of pension, although in a few instances approximately one third is given, this being increased 2 per cent for each year of service in excess of 25.

Teachers are retired for pensions on the basis of years in service, or age, or some combination of service and age. Thirty years of teaching service, and 60 years of age are the figures appearing most often.

Disability retirements are allowed in the majority of systems, the disability allowances seldom being equal to the full pensions. Withdrawal benefits are also allowed in about three fourths of the systems, total contributions without interest being the usual amount.

School Officers' Meetings in Washington Supt. Frank W. Ballou is following with success definite schedule of meetings with various groups of school officers throughout the year. His schedule, which is announced at the beginning of the school year, is followed closely.

These groups and the meetings for the present year are as follows:

1. Superintendent and eight assistant superintendents: 1:00 p.m., second and fourth Saturdays

of each month. 2. Senior high-school principals: 11:00 a.m., third Saturday of each month.

Supervising principals and directors: 11:00 a.m., first Saturday of each month. 4. Junior high-school principals: 11:00 a.m., fourth Saturday of each month.

5. Superintendent and administrative officers who prepare board orders: 2:00 p.m., Mondays immediately preceding first and third Wednesdays

6. Administrative officers, supervisory officers, directors, heads of departments, assistant princi-

pals, administrative principals and teaching principals: 3:45 p.m., fourth Thursday of each month.

7. Administrative principals, associated supervisory officers, and those desiring to become administrative principals. istrative principals: 3:45 p.m., second Thursday of each month.

Personnel in the U.S. Bureau of Education Mr. Carl A. Jessen of Montana has been appointed specialist in secondary education in the U.S. Bureau of Education. This is a new position, which concerns itself with all questions relating to the administration and conduct of secondary schools.

Mr. Jessen has been state inspector of high schools for the Montana State Education Department for the past few years. He has had wide ex-

perience in high-school work and is well qualified

for the position in the Federal Bureau.

Mr. William H. Gaumnitz has been appointed associate specialist in rural secondary education in the Bureau, to fill the vacancy created by the resignation of Eustace E. Windes, who is now on the faculty of the department of education of the University of Virginia. Mr. Gaumnitz has had wide experience in public-school work in Minnesota and North Dakota, and comes to Washington from the North Dakota State Normal School.

Washington, D. C., School Survey
The survey of the public-school system of the
District of Columbia, by the U. S. Bureau of Efficiency, is practically completed and will be submitted to Congress when it convenes this month. No information is being given out even to the school officials until the report is in the hands of Congress. Three separate congressional committees will receive copies at the same time.

The investigations by the Bureau of Efficiency have been in progress since early spring. They have gone into questions of costs primarily, and to the number of teachers in the system in relation to the actual needs, as these are the questions raised in Congress that resulted in the action providing the survey. Sufficient school housing has also been a point of investigation. Costs in the District are compared with costs in the other cities of the United States. Much data were collected throughout the country on this question. Also much data were collected on the number of supervisors and teachers employed throughout the cities of the United States

The Bureau of Efficiency has assisted in bringing up to date the school-census data. While the office of school-attendance census and work permits had completed its fieldwork in a house-to-house census, of funds. The U. S. Bureau of Census has assisted the Bureau of Efficiency in this part of its survey

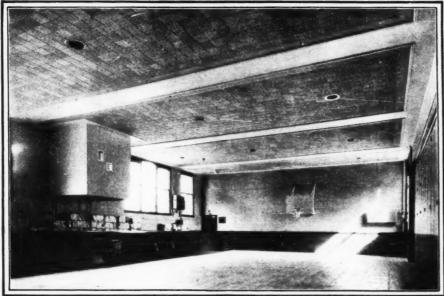
It seems to be generally understood that the report gives the superintendent's office and the administrative officers a "clean bill of health."

Lumber in Building Operations The use of lumber in building schools and other types of construction is at least holding its own in comparison with the use of other materials, accord-

(Concluded on Page 82)

Noise disturbs concentration

... Eats up mental energy





Gymnasium, Beehive School, Warrensville, Ohio. Physical education classes and indoor games are conducted here without disturbing the rest of the school with shouts and noises. These noises are absorbed by the Acousti-Celotex in the ceiling. Fulton & Taylor, Architects; George P. Little Company, Acousti-Celotex Contractor.

Protect your students from disquieting noise by installing Acousti-Celotex... This remarkable sound-absorber also will *swallow-up* echoes and reverberations in your school auditorium

NOISE does more than merely disturb students. It uses up valuable energy . . . induces early

fatigue. Noise lowers the quality as well as the quantity of schoolwork students are able to do.

But you can easily spare your students this waste of mental energy. For Acousti-Celotex, applied to the ceiling of any school room, will reduce sound disturbances of all kinds. This strong fibre tile has remarkable sound absorbing qualities. It creates quiet by the simple process of swallowing-up distracting noises and echoes.

And your school auditorium will be much easier to hear in, after Acousti-Celotex has been installed. School as-

semblies, plays and operettas can be conducted without interference from sound reverberations, making the programs twice as enjoyable. Because it is so easy to decorate, Acousti-Celotex is giving new beauty to walls and ceilings of school buildings everywhere. Pleasing in its natural buff color, it may be arranged in a variety of attractive patterns. The drilled perforations enrich its surface with a texture suggestive of old Spanish indented tile.

When installing Acousti-Celotex, you can paint or decorate it any way you like. For paint will not lower its soundabsorbing efficiency. Most acoustical materials depend entirely on a porous surface for sound-absorption. And decorative treatment partially closes these pores. But Acousti-Celotex is perfor-

ated, giving it an added area for sound absorption which paint does not affect.

Acousti-Celotex comes from the factory in finished rigid units that are ready to install. Applying it to walls and ceilings is simple work—no finishing processes are necessary. You can have it installed in any building, new or old.

Acousti-Celotex now is being used in school auditoriums, corridors, classrooms, shops, gymnasiums, chapels, cafeterias, band and chorus rooms.

Write now, for the new Acousti-Celotex book. Learn how schools everywhere are using this remarkable finished unit sound-absorber. If there are questions on which you would like further information, The Celotex Company will

gladly have its nearest representative call.

THE CELOTEX COMPANY Chicago, Illinois

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STEEL LOCKERS

Are Permanent Investment Because of A-S-E DEPENDABLE Construction

OCKERS, as carefully constructed as a modern sky-OCKERS, as carefully constituted as a scraper, represent a permanent investment in your scraper, represent a permanent investment in your school. A-S-E lockers embody the fundamental principles of "lasting" worth in their substantial construc-tion. Fool-proof "built-in" features make these lockers outstanding values from the standpoint of appearance, endurance-and RIGHT PRICE.

Look over your locker needs now. No doubt attendance in your school, as in common with schools all over the country, showed an increase this fall. New lockers to meet additional pupil needs can be ordered now, and installed without delay or confusion during the holidays. Write for Catalog C-25 for more detailed

your estimated needs to our Engineering Department; they will gladly solve your locker problems.

information. Send in

Door has double flange entire length on both vertical edges. Single flange on top and bottom. Gives elasticity and withstands bang-ing.

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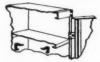
Construction

Door Frame is of unit type and securely riveted. It achieves rigidity.

Concealed hinges carry the weight of the door with-out possibility of sagging.

Six louvres at top and bottom estab-lish the proper the current of air through the lock-er. Good ventila-tion is important.





Shelves are specially formed so that there are no sharp edges. Gives them added strength.



6-inch legs enables cleaners to work under lockers without difficulty.

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ing to weekly reports of the National Lumber Manufacturers' Association.

Its report for the last week of October shows, for instance, that the production of softwood lumber for the week was two million feet greater than for the corresponding week in 1926, and the shipments were one and one-half million feet greater.

Department-of-Education Bill
With the opening of the 70th Congress in the
early part of December the Curtis-Reed Departmentof-Education Bill goes to both the House and Senate. As introduced this year in the new Congress, it is almost identical with its predecessor in the 69th Congress, although it may be known by a new name if the personnel of the committees on education in the Senate and House changes.

Supt. William M. Davidson of Pittsburgh is now Chairman of the Legislation Commission of the National Education Association, and as such, will be in charge of the association's activities on behalf of the proposed measure.

Glass Substitutes Some of the new glass substitutes now on the market are urged for school buildings because less breakable than glass, and because they are supposed to transmit ultra-violet rays, a desirable property as such rays have a vitalizing effect beneficial in any occupied building. The importance of this latter property must not be overestimated as, according to the U. S. Bureau of Standards, much of it is lost rapidly under certain conditions. The Bureau has recently investigated and tested these glass substitutes and its findings are as follows:

"As the result of work in the bureau's radiometry

section during the last few months it has been demonstrated beyond all reasonable doubt that all the new glasses now being marketed for transmitting the ultra-violet 'vitalizing' or 'activating' solar rays, at 290 to 310 millimicrons, undergo a photo-chemical action and decrease greatly in transparency to these activating rays when exposed to ultraviolet radiation.

in transmission of these glasses at 280 to 310 millimicrons is of the same nature whether the glass is exposed to the sun, the quartz mercury lamp, or the carbon are, the change in being relatively more rapid for the mercury are than for the sun.

"Glasses which transmit 15 to 25 per cent at 280 millimicrons when new decrease in transmission to less than 5 per cent (depending upon the thickness

and the amount of ferrous iron present as an impurity) after a few hours' exposure to the mercury are or a few weeks to the sun.

ROMINE ROMINE

"After this drop to about 2 or 3 per cent at 280 millimierons, 15 to 20 per cent at 303 millimierons, and 30 to 45 per cent at 313 millimierons, prolonged exposure to the sun and to the mercury arc does not cause much further decrease in spectral transmission, as is to be expected since the photo-chemical action is fairly complete.

"After this solarization has taken place these glasses probably still retain sufficient transparency to these vitalizing rays for therapeutic purposes. However, in all these glasses the transmission approaches rather close to the minimum limit that seems permissible in order to insure active stimulation of calcium metabolism, to prevent rickets, etc. The determination of this minimum limit in transmission for therapeutic purposes is a problem that will require further investigation by biologists."

Annual Report of Superintendent Frank W. Ballou

The annual report of the superintendent of schools of the District of Columbia is under preparation and will be issued soon. In it, Dr. Ballou presents the principal happenings of the past year, varying from the usual type of report to discuss certain fundamental school administrations. fundamental school-administrative certain lems. Among these are the questions of lengthen-ing the school day and lessening home study, stag-gered hours for school opening to relieve traffic congestion and dangers, supervision of high-school fraternities and organizations, policy on conduct of employees, including teachers, and the policy regarding special "weeks."

Another feature is a section with brief statements for various assistants and supervisors, entitled, "What School Officers are Saying and Doing." Each officer annually submits a report covering his work to the superintendent. The "Sayings and Doings" are quoted by Dr. Ballou from these complete reports and are selected because they contain information of especial interest.

The School-Attendance Department reports:

"From September 21, 1926, through June 22, 1927, there were reported to this office for special investigation a total of 28,609 cases of absence as compared with 20,078 the year preceding. Attention is called to the fact that these 28,609 cases do not refer to those which were reported under

the legal provisions requiring the reporting of absences under specified conditions. The 28,609 cases constituted special requests from the public, paroch'al, and private schools, social agencies and citizens for service from the attendance officers in the investigation and adjustment of attendance difficulties. There was an increase of 42.4 per cent in the volume of work reported for special investigation, as compared with an increase of 1.95 per cent in the public-school enrollment in 1926-27 over that of 1925-26."

The Visual-Instruction Department states:

"The program of motion-picture lessons has been carried on along the same lines as in preceding years. Two hundred and forty-six film lessons have been divided between the three members of the corps. For the colored schools alone, six theaters were in use for the members of the corps. were in use for the motion-picture lessons, 132 lessons were given, with a total attendance of 34,652. Other lessons were given in classrooms. Slides, pictures, models, and motion pictures were included in the material used and distributed to schools for teachers' use. There was a turnover of 8,595 slides. Elementary, junior high, senior high, and normal schools were served."

The Department of Educational Research reports: "The total number of tests given was 110,822.

"We have continued our practice of testing all pupils going to junior high school so that the re-search ratings can be sent to these schools. Any pupils not so tested who enter junior high schools from outside the city have been tested at the junior high schools by someone assigned to the task.

"The clinical phase of our work has been one in which we have taken considerable pride; we think it one of the most distinctive phases of service which we have been able to render, this clinical study of crucial problem cases in our schools."

"One thousand, four hundred and eighty-seven maladjusted children with whom we have worked showed 361/2 per cent due to mental inferiority.

"We found that a great many pupils reported to us were neurotic cases, many of these so neurotic as to need psychiatric treatment (87 of them). We were able to secure help for 21 pupils through the ever-splendid cooperation of physicians. The difficulty with these cases, of course, is an emotional and volitional one and a matter of mental maladjustment, not a matter of mental inferiority."

of 19 e, d n

UNIVENT and Glass - make the difference





NEVER again need teacher and pupils be handicapped by dangerous chilly drafts . . . floating dust and smoke . . . loud, distracting noises from the outside world . . . impure, stuffy, overheated air.

Health is safeguarded—energy and mental efficiency are lifted to a new high level, by a scientific method of controlled ventilation which permits of keeping windows CLOSED. It is called Univent Ventilation.

The Univent brings in fresh outdoor air, purifies it, heats it to the correct temperature when heat is necessary, circulates it gently yet thoroughly throughout the entire



*Lincoln Junior High School, equipped with



VENTILATION

room. All day an ideal atmospheric condition prevails.

Not only school authorities, but architects, heating engineers and physicians endorse Univent as an important advance in ventilation. It is serving today in thousands of schoolrooms.

We will gladly send you our book, "Univent Ventilation." It contains valuable information on the problem of effective schoolroom ventilation, and shows why only the Univent gives Univent Ventilation. Write for your copy today.

*Lincoln Junior High School, Canton, Ohio Vernon-Redding and Associates of Mansfield, Ohio, Architects

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New York—Canajoharie, N. Y., Union
Free School District No. 8...... 250,000 New York—Glen Cove, N. Y., School.... New York—Hempstead, N. Y., Union Free School District No. 9..... 250,000 275,000 New York-New York, N. Y., School Con-4,600,000 Series G.
New York—Oswego, N. Y...
New York—Tonawanda, N. Y., Union Free 457,000 500,000 School District No. 1. 350,000 Ohio-Bowling Green, Ohio, School Dis-350,000 Pennsylvania-Lancaster, Pa., School Dis-1,250,000 Pennsylvania-New Castle, Pa., School 250,000 Pennsylvania—Philadelphia, Pa., School 2,000,000 Building and Repair..... 1,000,000 500,000 350,000 District

Wyoming-Laramie Co., Wyo., School District No. 1..... 450,000

SUPPORT OF ELEMENTARY EDUCATION

IN WISCONSIN Under the school-equalization law of Wisconsin, which becomes effective January 1, 1928, the financial aid granted to common-school districts has been readjusted. Under the law, state aid will be distributed to school districts in recognition of low assessed valuation. The essence of the measure is distribution in accordance with local needs.

Under the former system, the school fund was distributed upon the school census basis, which during the year 1926 amounted to \$4.21 per child

ing the year 1926 amounted to \$4.21 per child.

Under the new law, the common-school fund income will continue to be distributed upon the school census basis. There will be paid to each district

about 33 cents per child upon the census.

The big equalizing feature is made operative through the public-school fund income, which provides for the annual appropriation of one and one-tenth mills for each dollar of the valuation of the property of the state as determined by the tax commission in section 70.57 of the statutes. The seven tenths mill tax which provided \$2.745,292 seven-tenths mill tax which provided \$3,745,322 under the former law, is now raised to one and under the former law, is now raised to one and one-tenth mills and will produce \$5,885,509 for the public-school fund income. Two million, one hundred and forty thousand, one hundred and eighty-seven dollars more will be raised for distribution to the elementary schools than the amount previously available viously available.

The public-school fund income, under the new law, will be distributed in 1928 as follows:

1. To each school district or city, \$250 for each elementary teacher employed on March 1, 1927.

2. To each district or city, \$250 for each elementary teacher, to be paid out of a tax levied upon the county. the county.

The law places this year's apportionment of school money upon the old method. In 1928 the public-school fund will be apportioned upon the equalization basis.

School Taxation in Missouri

-A revision of the income-tax system of Missouri is urged by Prof. Raymond D. Thomas of the Southwest Teachers College of that state, whereby the tax derived will be increased from \$4,000,000 to \$20,000,000 and thus strengthen the state school "A detailed defense support. Prof. Thomas says:

850,000

of the income tax cannot here be made. Personally, I believe the income tax, better than any other kind of tax, meets the tests of justice and equity in taxation. A well-written income-tax law, placing its administration under the authority of the state tax commission, should be relatively easy to administer, will normally and regularly yield the effected revenue, and finally can be paid by the tax-payer without impairing his capital fund or in any way handicapping his carping capacity. The best way handicapping his earning capacity. The best thing that can be said for the income tax is that it is an income tax and is therefore paid out of income. Taxes should never come out of capital. Those who earn are able to pay income taxes."

He then urges the following revision:

Place the administration of the tax under the authority of the state tax commission.

"(2) Abolish the present level rate of 1 per cent

on taxable income, regardless of amount.

"(3) Levy a progressive rate on net something like the rate recommended in the 'model law' of the National Tax Association, as follows: 1 per cent on the first \$1,000 of net taxable intaxable income. This rate wight become to 6 per cent on come. This rate might become, to 6 per cent on all net taxable income in excess of \$6,000. An exemption of \$1,000 for a single individual, \$2,000 for the head of the family, and \$200 for each dependent child should be provided. These are the present exemptions.

Springfield's School Awakening

-The city of Springfield, Missouri, finds its school costs in comparison with those of other communities to be suspiciously low. The cost per pupil in St. Louis is \$144, in Kansas City \$115, in St. Joseph \$90, and in Springfield \$56. The average in the entire state is \$65.

age in the entire state is \$65.

In examining cities of population from 30,000 to 100,000, it is found that the cost per pupil is as follows: Long Beach, California, \$138; Colorado Springs, Colorado, \$125; South Bend, Indiana, \$101; Passaic, New Jersey, \$101; Topeka, Kansas, \$96; Terre Haute, Indiana, \$110; Berkeley, California, \$126; Sacramento, California, \$126; Waterbury, Connecticut, \$120; Davenport, Iowa, \$113; Lincoln, Nebraska, \$104; Green Bay, Wisconsin, \$97; Duluth, Minnesota, \$95; Sioux City, Iowa, \$103; Sheboygan, Wisconsin, \$97; Quincy, Illinois, \$93; Wichita, Kansas, \$89. \$93; Wichita, Kansas, \$89.

Incensed over this showing the Springfield Leader says: "Why haven't we more money to spend on

(Continued on Page 87)



Now - if ever - come trying days

WINTER! Rain—snow—mud—slush! Through streets and playground and right into the school tramp thousands of little feet, each with its burden of mud and filth. Literally pounds of dirt deposited on corridor and classroom floors. Left undisturbed, it will dry into dust and be blown into every corner of the room, permeating the entire atmosphere.

It is a situation no mother would put up with in her home for a moment. But it is a very real problem in every school,—and multiplied a thousand fold. Ordinary methods of cleaning simply cannot cope with it. Occasional mopping is a makeshift.

There is one sure and money saving way to keep floors clean at all times and in any weather. Thousands of schools have already discovered it. Every month hundreds more adopt the electric way—the FINNELL way.

The FINNELL Electric Floor Machine can be used to scrub any type of floor. With powerful brushes, revolving over 200 times per minute, it removes every trace of dirt or discoloration. Wood, marble, tile, terrazzo, rubber tile, linoleum, cork, mosaic, magnesite—the FINNELL leaves them sparkling with clean attractiveness. Out of cracks, crevices, and depressions, comes dirt that could never have been routed by mopping or hand scrubbing. As a result, the floors are not only more sanitary and more beautiful, but better preserved.

Waxes, Polishes Too

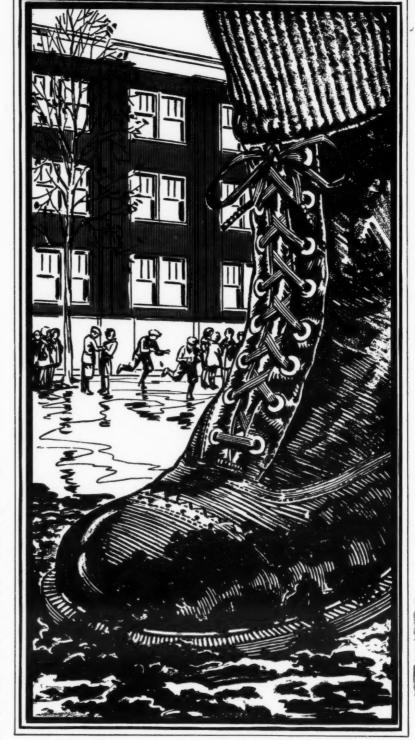
By instant adjustment the FINNELL applies wax and polishes wood or linoleum floors to lustrous beauty. They are never left sticky or slippery. Floors cared for in this way have a much longer life of utility and attractiveness.

The FINNELL works with incredible ease and speed. It has been known to do the job of as many as seven workers. It cleans easily under stationary desks—under tables, chairs, teachers' desks, etc.

Saves Cost Quickly

The FINNELL soon saves enough in time and labor to cover its original cost. After this, it becomes a low-up-keep investment that has enabled hundreds of schools to reduce their floor maintenance budgets over half! There are eight models,





enabling a FINNELL system of floor maintenance to suit every school need. A complete system can be easily transported by automobile and used for a group of schools,

thus reducing immediate equipment investment.

Send for Details and Estimate

Both are free. You will find the literature on safe floor hygiene and its economical maintenance worth while and informative. Write for it today. If you wish an estimate of equipment needed and possible saving, enclose a description of floors, area, present cleaning methods. Address FINNELL SYSTEM, INC., 612 East St., Elkhart, Ind. (Factories Elkhart, Ind., Hannibal, Mo., and Ottawa, Can. District offices in principal cities of U. S. A.)



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Dunham Differential Vacuum Heating System



Based on bed-rock laws of physics

THE OPERATING principle upon which the Dunham Differential Vacuum Heating System is established is a bed-rock law of physics.

Engineers know the law as the Steam Table. Simply stated, it is that "the boiling point of a liquid is the temperature at which the pressure of the saturated vapor first becomes equal to the pressure existing outside." (Millikan.) Professor Millikan further states: "Since the boiling point has been defined as the temperature at which the pressure of the saturated vapor is equal to the outside pressure, and since the pressure of a saturated vapor varies rapidly with the temperature, it follows that the boiling point must vary as the outside pressure varies."

Due to the workings of this law it is possible to produce steam of greatly varying temperatures in a Dunham Differential Vacuum Heating System simply by varying the pressure to which the water in the boiler is subjected. This is mechanically accomplished by means of the Dunham Differential Vacuum

The importance of the Dunham application of this basic law of physics to the solution of one of the greatest problems of heating cannot be overestimated. During 95% of the heating season ordinary steam heating systems overheat because steam at 212 degrees or higher is circulated in the radiators and piping. No provision is made nor can any be made, in such heating systems, to regulate the heat emission from the radiators to conform to the heat loss from the building. Consequently, windows are thrown open to cool the overheated rooms, and a heavy fuel waste results.

windows are thrown open to cool the overheated rooms, and a heavy fuel waste results.

The Dunham Differential Vacuum Heating System combats this waste by utilizing steam produced at varying subatmospheric pressures. This sub-atmospheric steam is maintained at the proper pressure, and temperature, to provide comforting warmth in every room, with an input of heat into the radiators sufficient to compensate for the heat loss from the building, but without the overheating common in ordinary heating systems.

No new principle is used to attain this long-sought goal. The principle is as old as the very atmosphere which surrounds our earth. The Dunham devices which utilize this important principle are, however, NEW, ATTENTION-COMPELLING, AND REVOLUTIONARY.

They have made the Dunham Differential Vacuum Heating System the outstanding heating development of the decade, and one destined to work as radical a change in present-day heating methods as did the Dunham Thermostatic Radiator Trap when it revolutionized steam heating a quarter century ago.

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SOLAR self-closing RECEPTACLES are of all steel construction, braced and reinforced at all points of strain, and the joints are inseparably welded. No weights,

springs, or pulleys to get out of order. They are built to endure long severe service and are scientifically designed and constructed to meet all conditions where waste accumulates.

SOLARS can be had in nine different sizes and finished in gray, green, white, and grained mahogany.

Write for detailed information and name of nearest distributor.

SOLAR-STURGES MFG. CO., Melrose Park, Ill.

SOLAR Self-Closing RECEPTACLES

(Continued from Page 84) our school system? According to Superintendent Study we are really outside the law now in the matter of our school levy. We are forced, in order to raise that feeble, insufficient \$56, to add so many mills for repairs and then instead of repairing the buildings, and God knows some of them should be repaired out of existence with dynamite, we have to dump this repair levy into the general pot to give us bread and butter money enough to run the second-rate school system which we have. The trouble therefore doesn't rest in the direction of percentage levied, for that seems sufficiently if not extraordinarily high; the root of the matter is in an insufficient assessment in this district on which the levy is based. A high levy yields us only \$56 per pupil, That tells the story. And against a state over assessment of \$7,332 per pupil we have an assessment per pupil of only about \$4,000. No unusual intelligence is required to deduce where the real trouble lies."

FINANCE AND TAXATION

—The school board of Quakertown, Pa., is considering a \$150,000 bond issue for a new high-school building. It finds it necessary, however, to create a public sentiment in its behalf.

"The world is run on credit. We can no longer pay as we go," recently said John B. Wynkoop, business manager for the Bridgeport, Conn., board of education. "This is true of every municipality, including our own. It is true of the federal government itself. Those who are opposed to bonding have yet to produce the individual or group of individuals in any community who prefer to go back to the sand and gravel streets, the horse-driven fire department, a reduced police force or the 'Little Red Schoolhouse' with all its inconveniences. From observation, the only criticism I have to offer in regard to schoolhouse construction is that after the school board has awarded the contract or contracts for a new building, too much time is lost in its construction."

—The board of education of Neenah, Wis., aban-

—The board of education of Neenah, Wis., abandoned a new senior high-school-building project which involved a cost of \$650,000. The project ran \$150,000 in excess of the amount appropriated by the city council, two years ago. The board officially withdrew its request for the additional sum and will review to be sufficiently below the city council.

and will revise its building program.

—An estimated saving of about \$5,000 a year in the purchase of supplies for rural schools in San Luis Obispo county, California, was brought about

by a cooperative arrangement under which bids were received and goods ordered by a county purchasing agent. Prices paid for supplies, it is said, have been reduced more than half, and the time of teacher and school board saved by eliminating the visits of agents.

—Acting Secretary Thomas A. Spencer of the Tacoma, Washington, board of education, has issued an exhaustive financial report on the school system of that city. The budget, for the year ending with June 30, 1927, was \$1,879,423. The estimated revenue provided for a surplus of over ten thousand dollars. Mr. Spencer lists the assets and liabilities and provides a detailed statement of expenditures. The report as a whole demonstrates a model system of school account keeping. The members of the board of education are S. Christian Ericksen, president; Harold D. Hayward, vice president; Mrs. Rhoda B. Miller, R. Lester Kelly and A. A. Rankin. William F. Geiger serves as superintendent.

—The school budget of Indianapolis, Indiana, has been reduced by \$3,000,000 by the state tax board. In comment thereon the Indianapolis News says: "This cut, though small, will be welcomed by the people. It ought to be only a beginning. When a community finds itself with a school levy greater than the levy for all city purposes, as has of late been the case in Indianapolis, when schools cost more than police, firemen, parks, sanitation, garbage removal, street lighting and street cleaning—and all other municipal activities—then it is time to begin looking into school administration. This excess of school expenditures also came at a time when municipal expenditures were high—when there was hardly a pretense of economy. Now it is being more generally realized that the only way to reduce taxes and keep them within reasonable bounds is by spending less money. There is no other way. It is a fact also that often by spending less money we get more efficient service. That idea is making its way into public consciousness."

—The board of education of Paterson, N. J., contemplates a decided raise in high-school tuition rates. There are approximately 800 nonresidents in the high schools. These now pay only \$12 annually. It has been ascertained that the actual cost of educating these pupils is \$150.62 per pupil, and plus the depreciation in the high-school buildings brings the total to \$165. The board therefore fixed the tuition fee at \$165 per year which will mean a saving to the school system of \$25,000.

—President J. Lewis Coath of the Chicago board of education proposes to cut down the payroll by dropping the special directors and supervisors. Among the first to be dropped are the director of special schools whose salary is \$5,500; the director of child study, \$5,400; assistant superintendent of schools, \$10,000; several examiners whose salaries are fixed at \$8,500. Those slated to go will be select to resign

asked to resign.

—New York, N. Y. The city's share of the increased educational budget for next year, as approved by the board of estimate and apportionment, represents the smallest increase in many years, being but \$659,196. This year's budget represents an increase of \$2,055,576 over the previous year, while the increase in the city's share of the 1927 budget was \$3,723,251.

budget was \$3,723,251.

The total school budget allowance is \$124,554,877, as compared with \$107,494,954 for 1927. Fourteen million dollars of the increase of \$17,049,923 has been reserved for the increases in salaries of members of the teaching and supervisory force, administrative and clerical staff, and the custodial force of the public schools.

The city's share of the increase in the 1928 budget is small because of the large increase in state school aid, more than \$40,000,000 being provided by increased state aid for next year, including the increases unexpended since August 1 of this year. The total sum which will be paid by the city toward this huge budget will be \$84,347,196.

In holding the city's share of the budget to such a small increase over last year, the board of estimate eliminated the \$10,000 item for the improvement and extension of the school-lunch service. The item was eliminated chiefly because of a lack of agreement between the school officials and those interested in improving the efficiency of the school-lunch service.

—The school board of Cambridge, Mass., has adopted a budget of \$1.748,848 for the school year 1927-28. The largest item in the budget of expenditures is \$1,300,462 for teachers' salaries. The cost of general miscellaneous expenses was \$11,630; the cost of textbooks and supplies was \$90,000; the cost of fuel and light was \$47,000, and the cost of janitors' salaries was \$125,460. Repairs to buildings during the year will amount to \$70,000.

—The school board of Philadelphia, Pa., has adopted a report of the finance committee, providing for the creation of a permanent loan of \$2,000,000, and for the issuance of bonds evidencing

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the same. The bond issue will be used for the purpose of obtaining sites and erecting buildings and additions for elementary and high schools in the city. The bonds will be numbered from 1 to 20,000, each for the sum of \$100, and will bear 4-per cent interest.

—The state school tax for the support of the normal schools, the university, and the common schools of the state of Wisconsin during the year will reach a total of \$6,700,000, according to estimates received from the secretary of state. Of the total, the common schools will be allowed a seventeenth-mill tax, less \$200,000 taken from the general fund. Mill taxes levied by the state this year on the general property is as follows: The university, \$2,107,000; the normal schools, \$936,000; the common schools, \$3,733,000.

—Indianapolis, Ind. Items totaling more than \$280,000 have been eliminated from the 1928 budget of the school heard. The reduction is attributed

\$280,000 have been eliminated from the 1928 budget of the school board. The reduction is attributed to the fact that the board's estimates were considered excessive by the local tax board and tax-payers' organizations. Eliminations approved by the school officials include \$100,000 for repair of elementary schools, \$17,158 for payment of orders, \$18,930 for construction work on the Shortridge High School, \$10,000 for improvement of streets at elementary schools, and other reductions totaling elementary schools, and other reductions totaling

several thousand dollars.

—Cranston, R. I. The city council has approved a school budget of \$385,200 after making a reduction of \$46,225 in the original appropriation of \$431,425. The school board was given an increase of \$8,452 in additional revenue to be derived from

—Joliet, Ill. The school board of Joliet town-ship is confronted with a serious financial situa-tion due to increasing school expenses with no tion due to increasing school expenses with no increase in revenue. The board of review recently refused to raise the tax values in the township in the face of depleted finances in operating twenty schools on the present revenue. The township has reported a net gain of more than 200 students, which has created a need for new buildings and additional techniques. additional teachers.

—School accounting methods was the subject for discussion at a recent meeting of school officials of Wake and adjacent counties in North Carolina held during the fall in the state capitol building. Mr. John L. Hathcock, of the division of school accounting in the state education department, was in

charge of the program.

—Textbooks in Louisiana schools, under the present system, cost the people of the state less per pupil enrolled, than do the free systems in Maryland and Texas, according to Mr. Foote of the state education department. During the past six years, textbooks cost Louisiana school children an average of \$10.0 a year on against \$1.27 a year in of \$1.01 a year, as against \$1.27 a year in Maryland, and \$1.63 a year in Texas, where free systems are in operation. The statistics show that \$2,407, are in operation. The statistics show that \$2,407,-743 were spent for textbooks in Louisiana during the last six years, which is \$401,290 a year.

—Bellingham, Wash. The school board has adopted a budget of \$596,466 for the school year 1927-28. Of this amount, \$30,500 is for general expenses; \$381,476 for instruction purposes; \$37,670 for operation of plant; \$10,610 for maintenance of plant; and \$7,750 for capital outlay.

—Newport News, Va. The school board has adopted a budget of \$395,145 for the school year 1927-28. This amount is \$15,390 more than the estimated expenditures for 1925-26.

—Racine, Wis. The board of education has estimated that \$1,309,009 will be necessary to operate the schools during the school year 1927-28. The principal items in the budget are \$524,350 for teachers' salaries, \$100,000 for equipment of the two high schools, \$250,000 for principal and interest on bonds, and \$50,000 for janitors' salaries.

—The Oklahoma school-land department now has a fund with a valuation of \$30,000,000. The fund represents money loaned to farmers over the state, who purchase farms and pay in installments over a period of time. A large portion of the fund is derived from royalties on school land where oil wells are located. The school-land department reports that there are 900,000 acres still remaining from a large endowment of land from the federal government at statehood.

—Allegan, Mich. The school board of Allegan county has adopted a budget of \$103,383.

SUCCESS IN TEACHING

"It is folly to assume that because a man is a college graduate he is, therefore, a good teacher, or that a summer course in Elizabethan literature with credit leading to a degree will necessarily improve the performance of an incompetent teacher of sixth-grade arithmetic. To pass a qualifying examination and to secure an appoint-ment do not of themselves afford permanent ment do not of themselves afford permanent assurance of competence. To have taught for 25 years without being dismissed, particularly under our permanent tenure law, is not necessarily convincing evidence of superior teaching. It is even possible for a teacher to prepare a class for a successful encounter with the regents' examinations and still leave something to be desired.

"To the man who believes that the teacher is the center of gravity in the educational system.

the center of gravity in the educational system, neither extension work, compulsory courses, advanced degrees, examinations, achievement tests, rating charts nor required reading, all excellent things in themselves, will quite take the place of individual stimulus and help. Sympathetic, constructive, organized and greatly increased super-vision of classroom instruction by someone who is competent to give this service presents to my mind the greatest problem with which American school administration today is faced."—Supt. Ernest C. Hartwell, Buffalo, N. Y.

-Chicago, Ill. A program of economy in the operation of the school system has been announced by the school board. A comparison of school costs for 1927-28 with those for 1926-27 will be made in order to arrive at a uniform cost system. The adoption of a cost system, it is announced, marks the beginning of an era of minimum costs of opera-tion in the schools. At present the expenditure on

tion in the schools. At present the expenditure on requisitions for materials reaches the enormous figure of \$80,000,000.

—The Alabama State Board of Education has adopted regulations for the disbursement of the \$2,500,000 in funds voted by the legislature and over which the board has certain discretionary power. The three funds—the equalization fund, the attendance fund, and the high-school fund—constitute the bulk of the \$2,500,000 which is to be distributed to schools upon the school records be distributed to schools upon the school records

of the previous year.

—Portsmouth, Va. The maintenance costs of the schools for 1928 will aggregate \$415,744. Of this amount, the city council will be asked to provide \$333,434.

—Spokane, Wash. The school board has adopted a budget of \$1,958,935 for 1928, which represents an increase of \$40,662 over last year. The budget calls for a tax levy of 13.52 mills on the Spokane district, and a levy of 15.13 mills on the Hillyard

-Traer, Iowa. The board of education has voted to pay \$7,900 from the schoolhouse fund on the bonded debt of the school district, reducing the total debt from \$74,000 to \$67,000.

The bonds were issued for a school building com-

pleted in 1918, which cost \$105,000. The district bonded itself for \$92,000, and the balance of the expense was paid by overdrawing the funds and retiring the overdrafts from the yearly tax receipts. Of the maximum debt of \$105,000, a total of \$31,000 has been paid off and ratified to date has been paid off and retired to date.

-Battle Creek, Mich. The school budget requirements for 1927-28 amount to \$1,024,526, of which \$907,112 will be raised by taxation.

—Dayton, Ohio. A recent report of the clerk-treasurer to the board of education shows there will be a deficit of \$527,000 in school funds. If the one-mill levy for operating expense is approved by the voters, there will still be a deficit of \$177,000. Based on the tax valuation, a one-mill levy would provide a fund of \$350,000. It is pointed out that the cost of operating the high schools has increased 1500 per cent in the last 27 years, which has been attributed to an increase in enrollment, an increase in the number of buildings, and an increase in the alaries of teachers.

-West Allis, Wis. The budget of the school board for 1928 calls for an expenditure of \$516.834. The budget includes \$43,000 for new sites, and \$243,000 for new buildings.

-Green Bay, Wis. The school board has asked \$457,142 for the school year 1928, which is an increase of \$113,473 over the amount of last year.







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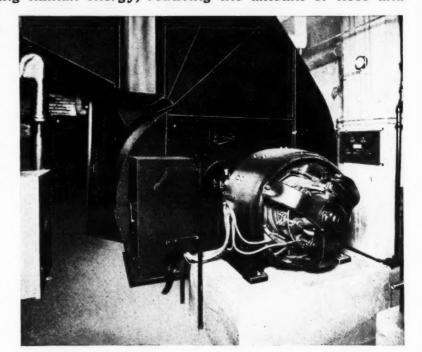
throat trouble, and maintaining a classroom condition in which children can work with normal production without interfering with the status of their healh."

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RULES GOVERNING ATHLETIC FIELD

—The board of education of Ironwood, Mich., has enacted definite by-laws governing high-school athletics. They include the following paragraphs:

For the care, management and supervision of said athletic field there is hereby created a standing

For the care, management and supervision of said athletic field there is hereby created a standing committee of the board of education to consist of four members, which is to be known as the athleticfield committee.

The committee shall comprise the secretary of the board of education, the superintendent of schools and two members of the board of education to be appointed annually in the same manner as other standing committees of the board are appointed.

The superintendent of schools shall be the executive officer, and the secretary of the committee, and the secretary of the board shall be the treasurer thereof; provided, however, in case the superintendent shall be unable to perform the duties of his position for any cause, then the committee may designate some other person to perform the duties of executive officer.

The executive officer of the committee shall have and exercise such authority over the athletic field as the committee may from time to time have authority to grant under this by-law and other direction of the board of education.

Subject to the general authority of the board of education over the affairs of the district the committee, hereby created, shall have power to make and enforce from time to time all necessary rules and regulations for the care and management of the said athletic field, and for the disposition of all revenues arising from any event held on said field

or granted for its care and maintenance.

All revenues derived from any event held on said field or granted for its care and maintenance shall be paid over to the treasurer of the committee and disbursed as the committee shall provide; provided, however, that in case an event is held on said field for which an admission fee is charged and incidental expense incurred, then in such case the committee may provide receipts of said event, the net proceeds to be paid over to the treasurer.

—St. Louis, Mo. The school board has proposed a change in the rules governing teachers. The new rules read as follows:

"No leave of absence for educational purposes either with or without salary shall be granted to any member of the department of instruction unless and until the applicant shall have been a member of that department for at least two years," so that section as amended shall read as follows:

"The salary of teachers shall be deducted pro rata for absence, except in cases of sickness of teachers when half pay shall be allowed; provided, however, that no deduction shall be made for three days' absence during the half quarter caused by death in the family, and that said half pay shall not extend for a longer period than five weeks. For the purposes contemplated in this rule, a teacher shall be considered by the principal as absent whose attendance at school shall not continue for at least one half the regular session. In cases where teachers may be absent because of accidental injury suffered in the school, salary may be allowed beyond the above limits as to amount and time, upon the recommendation of the committee on instruction. The superintendent of instruction is authorized to allow full salary for temporary leaves of absence for educational purposes having his approval. Allowance for salary, in whole or in part, for absence for other reasons than previously indicated in this section may be granted upon recommendation by the committee on instruction. No leave of absence for educational purposes either with or without salary shall be granted to any member of the department of instruction unless and until the applicant shall have been a member of that department for at least two years."

—St. Louis, Mo. The school board has adopted a new rule governing the award of contracts for supplies in the schools. The rule reads as follows:

"Section IX. Every contract for furnishing of supplies other than those mentioned in Sec. VII, amounting to \$2,500 or over, shall be accompanied by a bond executed by a solvent surety company. The amount of such bond shall not be less than 40 per cent of the amount of the contract and shall be fixed by the supply commissioner. If a surety company is offered as bond, such surety company must be acceptable to the U. S. Government on federal bonds. Bonds for lettings in sums less than \$2,500 may be required in like manner at the dis-

cretion of the supply commissioner. When the contract is awarded and the bond approved, the bond shall be filed with the contract."

ANNOUNCE CHILD LABOR DAY FOR 1928

The National Child Labor Committee of New York City has announced that Child Labor Day will be observed during the last week-end in January, 1928. As in former years, this will be an occasion for religious and educational organizations to bring to the attention of their members the fact that the problem of child labor is not yet solved.

The date of January 30 has been reserved as the day of observance for schools.

It is pointed out that few states have adequate protection for children in all respects. In fourteen states the law carries an exemption which makes it legal for children under 14 years to work in factories or canneries, at least out of school hours; in eleven states, children are permitted to work from nine to 11 hours a day; and in 22 states, children may run elevators.

Child labor involves more than the mere question of age at which a child may be allowed to go to work. It includes the prohibition of all work for children under 14 years, and of dangerous work for children under 16 years.

Why Mr. Coolidge Refused

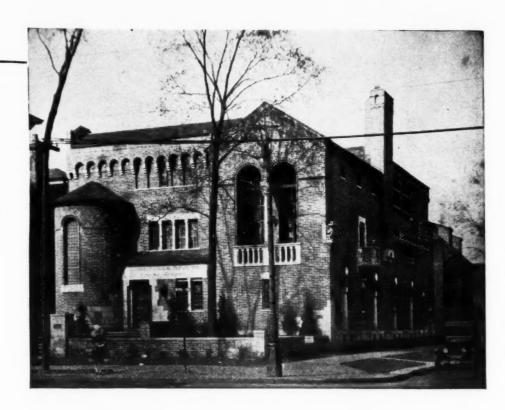
President Calvin Coolidge in October refused to issue a proclamation in observance of "Education Week," stating that in proclamations issued in 1923, 1924 and 1925 he had "expressed himself fully on the value of education... Because of the increasing number of requests made upon him by various interests for proclamation year after year he feels that in most cases they should not be made annual events." The Newark, N. J., Star-Eagle says: "In this last statement Mr. Coolidge again exhibits hard-headed common sense. Proclamations are intended for only extraordinary occasions. Multiplication and reiteration can have the effect only of cheapening them. When the public comes to regard executive proclamations as only perfunctory documents, the result must be nullification of the emphasis they intend. The fact is applicable to pronouncements by governors and mayors as well as to those of the president, on all subjects."

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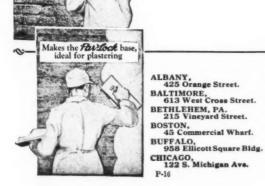


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SCHOOL HEALTH PROTECTION IN MARQUETTE, MICHIGAN

MARQUETTE, MICHIGAN

Dr. L. L. Youngquist, health officer of Marquette,
Michigan, in a recent article in "Michigan Public
Health," gives the results of a school health program in which school dentistry and diphtheria
prevention measures were carried out.

A free dental clinic for school children was
opened in the fall of 1925 in conjunction with the
health department. The pupils treated were limited to those whose parents could not afford to
pay for dental work. At the beginning of the school
year the school dentist and school nurse examine pay for dental work. At the beginning of the school year the school dentist and school nurse examine every child in the public and parochial schools, averaging 2,300 pupils, for dental defects. By means of a questionary sent to the parents of each child, pupils whose parents can afford to pay for dental work are weeded out. A special card index file is made of pupil patients who must be treated in the school clinic. The work is done at the expense of the city.

A report on the work for the last year shows a total of 1,100 pupils examined. There were 482 treated at the clinic, or an increase of 325; there were 936 extractions, or an increase of 576 over the previous year; the number of amalgam fillings was 1,044, or an increase of 542; the number of porcelain fillings was 133, or an increase of 121; the number of cleanings was 46, or an increase of

A study of the effect which toxin-antitoxin has had on the incidence of diphtheria in Marquette shows conclusively that toxin-antitoxin has helped to decrease the number of cases, as the city has been free from the disease at times when other places have had the usual number of cases. Toxinantitoxin was first used in the public and private schools in 1924, beginning with the first grade and going on up through the eighth. Since 1924 the

parents of children have begun to appreciate the parents of children have begun to appreciate the value of the work and have insisted upon the work being continued. Since the fall of 1924 and up to the present time, a total of 1,600 students have been immunized against diphtheria. In the year 1924 there were twenty cases of diphtheria with one death. In 1925 all of the six cases reported had not received toxin-antitoxin. In 1926 there were five cases with no deaths. In none of these cases had the patients received toxin-antitoxin and out of this number there were three nonresident cases. of this number there were three nonresident cases, two of whom had not been given toxin-antitoxin.

It is planned to continue the work next year with the aim of getting more children of the preschool age immunized.

HYGIENE AND SANITATION

—The Chicago Tuberculosis Institute recently completed a health survey of one of Chicago's junior high schools where at least 95 per cent of the pupils are negroes. Every student was given a physical examination by a trained and registered nurse from the staff of the institute. The survey was completed in 26 days. In each case, the nurse examined the throat, the glands of the neck, the teeth, and the eyes, and made a record of skin eruptions and orthopedic defects, and of the height and weight. Among the defects noted were 229 with enlarged cervical glands, 325 with tonsil defects, 444 with teeth defects, and 180 with enlarged thyroids.

-The U. S. Public Health Service, in a report on infantile paralysis extending over a period from July 3 to October 1, points out that the outbreak of the past summer was the largest in three years. During the period covered in the report there were 4,570 cases, as compared with 3,537 cases for a similar period in 1925, and with 1,228 cases for the same period in 1926. Most of the cases occurred in California, Illinois, Massachusetts, New Jersey, New York, Ohio, and Texas. During the week ending October 15, 579 new cases were reported throughout the country, which was a decrease of 71 cases over the number reported the preceding week. Washington and Pennsylvania were the only two states reporting increases in the number of cases.

-Following the death from infantile paralysis of a pupil in the Dewey School, Evanston, Ill., the health commissioner examined and quarantined about 100 children of the school and members of

—The U. S. Public Health Service, for the week ending October 1, reported a slight decline in the number of cases of infantile paralysis. The total number of cases reported at that time was 635, as compared with 641 for the preceding week. Increases in number of cases were reported in California, Illinois, New Jersey, Oregon, West Virginia, and New York, outside of New York City. Ohio suffered from the most serious outbreak of the disease in its history, with 750 cases and 69 deaths.

—The Wisconsin state department of education has announced the following rule on schoolhouse sanitation: All schoolhouses should be thoroughly cleaned prior to the hegipping of each school

cleaned prior to the beginning of each school term and also at reasonable intervals during the progress of the term. In the event of the outbreak of any contagious disease necessitating the closing of the school, the building should be thoroughly disinfected under the general direction of the local beautiful the school of health. board of health. In modern methods of disinfection the faith which was placed in the necromancy of the sulphur candle has been largely dissipated with a corresponding faith in the efficacy of sunlight, soap and water.

—The rule providing for compulsory vaccination enforced by the St. Louis, Mo., board of education for the past 45 years was renewed recently by a vote of 7 to 3.

-The board of education of New York City is combating deafness among children. The school officers are urging children to help by telling their parents and teachers: 1. If they cannot hear well in the back of the classroom. 2. If they have stuffed or muffled feelings in their ears. 3. If they have noises in their ears, like whistling, escaping steam, ringing bells, etc.

-Two cases of infantile paralysis have caused the withdrawal of more than 100 pupils from the schools of Columbia, Missouri.

—The Roosevelt School at Wichita, Kansas, was ordered closed in order that it be thoroughly fumi-(Concluded on Page 94)

RESULTS COUNT MORE BINGHAMTON N. Y. ADOPTS HEATOVENTS

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Christopher Columbus School erected in 1926 was equipped with forty-seven (47) Buckeye Heatovents.

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Architects

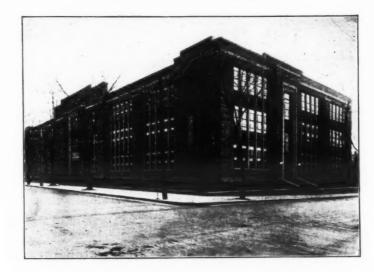
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BENJAMIN FRANKLIN School now under construction will be equipped with Forty-nine (49) Buckeye Heatovents. Heating Contract let to Gaylord & Eitapenc, Binghamton, N. Y. Architects, Conrad & Cummins, Binghamton, N. Y. (photo not yet available).

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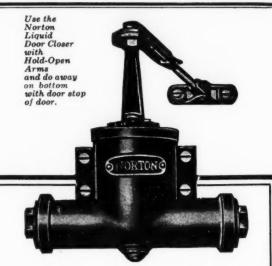
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East Side High School, Cincinnati, Ohio.

Cass Technical High School, Detroit, Mich.

Technical High School, Omaha, Nebr.

(Concluded from Page 92)

gated as a preventive against infantile paralysis. There is fear that the disease has broken out and might spread.

—In a campaign against diphtheria in Georgia, about 125,000 children were immunized through cooperation of the school authorities, the state board of health, and parent-teacher associations. About 50,000 of the children were treated privately. The state laboratory distributed 76,555 cubic centimeters of toxin-antitoxin and 7,650 Schick tests to determine immunity against the disease.

—Physically and mentally handicapped children will be taught in two new schools recently authorized by the Philadelphia board of education. One of the buildings will provide for children suffering from nutritional defects, tuberculosis, and orthopedic troubles, and in the other training will be given to mentally retarded children.

—Under the direction of Dr. Joseph C. Palmer, director of the division of health supervision of school children, Syracuse, N. Y., has completed hearing tests of 5,000 children by means of the phonoaudiometer. The method of testing the hearing of school children has met with great success. Syracuse is the only school system other than those cities of the first class to use this method. The purpose of the tests is to discover children with defective hearing and to prevent their becoming more deaf. Prevention is brought about by adequate correction of defects causing the loss of hearing.

—A complete program of school medical service in connection with 279 elementary schools in Belfast has been announced recently by the *Irish Nursing News*. A chief medical officer, with assistants, dentists, specialists, and fourteen nurses comprise the staff. A clinic for tonsil and adenoid cases of school children has been planned where children may stay during and after the operation. Two other branch clinics, with cleansing stations, will be conducted under the supervision of a nurse.

—Sioux City, Iowa. A great improvement in the teeth of school children has been shown in rooms in which regular health inspections have been conducted. Regular inspections are held each morning in all the classrooms, with the teacher standing with her back to the window as the class passes in front of her. Under the plan, every pupil who shows evidence of red puffy gums is referred to the school nurse the same as for any other infection.

—Health day was observed in the public schools of New York City on November 3, with the thorough examination of more than 1,000,000 pupils. Teachers examined each child for evidence of defective eyesight, hearing, teeth, and other ailments. It is noted that poor eyes are the chief difficulty outside of teeth defects, and that many boys and girls drop out of high school in the first year because of visual defects which retard their progress.

cause of visual defects which retard their progress. A recent report issued by the United States Bureau of Education states that 95 per cent of the kindergarten and first-grade pupils attending the District of Columbia schools are defective. Many of the defects were of a minor character, but all need correction. A total of 41,776 physical examinations were made by medical inspectors during the year 1926-27, but on account of the inadequate force only the younger children, 3,761, could be given thorough examinations. Of these 67.8 per cent were found to have defective teeth; 46.7 per cent, diseased tonsils; and 33.2 per cent, enlarged cervical glands. Among other defects noted were: Poor nutrition, 24.3 per cent; defective nasal breathing, 21.9 per cent; defective vision, 12.3 per cent; orthopedic defects, 10.9 per cent; anemia, 9.1 per cent; and cardiac disease, 2.3 per cent. Of 124 children reported as retarded in their classes, 120 were found to have some physical defect.

—The News of Ravenna, Nebr., in discussing the school strike of Gary, Indiana, where 1,000 pupils walked out of high school because 18 colored pupils had been admitted, says: "Probably not many of the striking students would have raised serious objections if 18 dogs had been allowed in the schoolroom. They would not have objected strenuously, we believe, if the dogs had been allowed to eat in the same room, but their sensibilities were outraged when 18 human beings, who by the accident of birth have dark skins, were present in the same room. The school board, regardless of the fact that the parents of the colored students were American-born citizens and taxpayers, applauded the sentiment manifested by acceding to the de-

CHATS DURING RECESS

mands of the strikers."

Independent, Helena. Montana: Moral suasion continues on its straight-laced march. Now the board of education of North Salem, N. Y., establishes a curfew law for all "principals, teachers,

and janitors" in the schools of that city. Mentors

and sweepers alike must be about the business of wooing Morpheus no later than 10 o'clock. Despite the swift and rosy hope that our old algebra teacher is handing bright youth the formulas in North Salem and is getting his just deserts for that time he kept us at the blackboard two hours after we displayed some very Stygian ignorance in our X's, the conviction remains that even a curfew law for teachers will not entice many of the younger generation into higher lives.

The Audubon, Iowa, Advocate: "The school board of Elm Grove township in Calhoun county is requiring teachers to put up a cash bond that they will not get married during the school year. Because it is against public policy that requirement probably would not stand very long in any court in the land. But there are other extralegal difficulties which call for the wisdom of a Solomon in achieving the end which the school board has in view.

"In the first place who would be foolish enough to sign a bond for a personable young lady even though she may not feel matrimonially inclined when making application for the bond? The result will be that teachers of that township are going to be a lot of relics who will place no temptation in the way of the young bloods of the township to woo them from their state of single blessedness. What the school board needs is not legal advice but some younger members who can still remember the thrill of anticipation just before the opening of school. When they take away the thrill from the boys who have saved their money to buy a flivver in order to be in a position to step out with the new teacher, should she be attractive enough, the time is rapidly approaching when you can't keep them down on the farm in Elm Grove township."

—The New York City budget for 1928, as adopted recently by the board of estimate, insures an increase of \$14,000,000 in salaries for the teaching and supervising staff of the city school system, the janitorial, and the clerical employees. The board of education will be allowed \$124,544,877, as against \$107,494,954 for the current year, an increase of less than \$17,050,000.

While the board of estimate has allowed the funds requested for the increases under the proposed salary schedules, it is understood that the \$14,000,000 has been appropriated subject to changes in the schedules.



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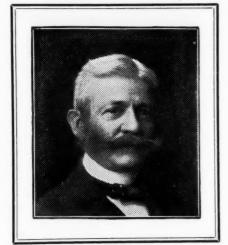
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-Mr. Louis A. Rice, of Cranford, N. J., has been appointed as an assistant in the division of secondary education of the state education department. Mr. Rice's work for the present will be limited to studies in commercial education. He will visit high schools and advise with officials and teachers on courses of study. He will also cooper-ate in the development of a program of training for commercial teachers.

Mr. Rice is well qualified to undertake the work in commercial education. He is a graduate of the School of Commerce, Accounts, and Finance of New York University and also of the school of educa-tion of New York University. He has had con-siderable experience in teaching and supervising the teaching of commercial subjects in the schools of

-Dr. Frederick B. Robinson, who was tendered a testimonial dinner by his fellow members of the New York Academy of Public Education on October 27, was honored as the first graduate of the New York City public-school system to be elevated to the presidency of the College of New York City.

—Mr. Walter Siders, formerly chairman of the board of trustees of the National Education Association, has gone to Augusta, Maine, as assistant to Dr. Augustus O. Thomas, president of the World Federation of Education Associations. Mr. Siders will edit and prepare for publication the minutes of proceedings of the meeting held in Toronto last

-Mr. J. H. Holst, of the University of Montana, Bozeman, has obtained a leave of absence University in order that he may devote his time to special work at the University of California.

-George C. Wells has been appointed chief h'ghschool inspector for Oklahoma to succeed E. E. Brown, who has accepted the presidency of the Southwestern State Teachers' College. The appointment was made by John S. Vaughan, state superintendent.

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-Marcus H. Webster has been chosen superintendent of schools at Hardner, Barber county, Kansas.

-Dr. Albert Leonard has served the schools of

—Dr. Albert Leonard has served the schools of New Rochelle, N. Y., as superintendent for 20 years. A high tribute has been paid him by the mayor of the city and the citizens generally.
—W. L. Daffron of Osborn, Mo., was elected principal of the Longfellow school at St. Joseph, Mo. The issue against an out-of-town man was raised by Dr. J. M. Bell, a member of the board, but he changed his mind when he discovered that there were no eligible local applicants.
—A dinner and reception was given by the board

-A dinner and reception was given by the board of education of Ridgewood, N. J., to the local teachers. The occasion was a tribute to Dr. H. S. Willard, who had served as a member of the board of education for seventeen years, Mrs. T. H. Grimley spoke for the board and Supt. Ira W. Travell represented the teachers.

-Mrs. Arthur Angel was elected to the school board at East Moline, Ill., without opposition.

-Dwight L. Clarke, a banker, was chosen member of the school board of Bakersfield, Calif.

-Mr. E. J. Wilson has been appointed a member of the school board at Red Bluff, Calif. Mr. Wilson succeeds E. F. Lennon.

—For the first time in many years the board of education of Tehama county, Calif., is composed entirely of men. The members of the board are: Mr. A. L. Shull, Mr. J. M. Stark, Mr. E. B. Warmoth, Mr. J. C. Frye, and Mr. P. D. Henderson.

-At the annual school election held at Florence, Colo., Mr. Charles G. McCandless was elected to succeed himself as a member of the school board. Mr. Frank P. Senaker was elected president to succeed George H. Wilkes.

-Ben Weidle has been reelected president of the board of education of St. Louis, Mo.

-Supt. Ray Armstrong and his teaching staff were guests at a five-course dinner, given recently by the Rotary club of Goldsboro, N. C., at the Goldsboro Hotel. At the dinner, appreciation was expressed for Mr. Armstrong's philosophy of thoroughness and efficiency. Mr. Armstrong came to the superintendency as a trained executive and an

-Supt. E. E. Roderick, of Belfast, Me., has been elected president of the Maine Teachers' Association.

-Dr. William A. Howe, chief of the medical inspection bureau of the New York State Education Department, has been elected first president of the newly organized American Association of School Physicians. In beginning his work, Dr. Howe will have the honor of naming prominent school physicians to committees on qualifications of school physicians, on standardization of methods and forms for medical inspection and health service, and on standardization of medical and health service in normal schools.

-Prof. John G. Fowlkes and Prof. C. J. Anderson of the University of Wisconsin have cooperated with Prof. M. V. O'Shea, of the same faculty, in conducting a survey of the school system of the state of Virginia. Prof. Fowlkes collected the data on the financial aspects of the Virginia schools, while Prof. Anderson took charge of the material on the common schools of the rural districts. The field work of the survey has been completed and the work of analyzing, tabulating, and printing the material will now begin.

-Supt. J. D. Sweeney, of Red Bluff, Calif., has been reelected treasurer of the Northern California Education Association. Mr. Sweeney is serving his 26th year as treasurer.

Mr. John Branigan of Gilbert, Ariz., has been elected superintendent of schools at Needles, Calif., for a four-year term, at a salary of \$5,000 per year.

-Mr. C. E. Fox of Kingman, Ariz., has been elected superintendent of schools at Gilbert, Ariz., at a salary of \$4,000 per year.

-Miss Marian B. Canfield, director of the new department of research and guidance at Springfield, Ill., recently gave a report of the work done since the department was organized. A new type of report card has been placed in use. The card shows the grades made by students in school subjects and the condition of their health.

-Supt. C. M. Bardwell of Aurora, Ill., who cently presented his resignation to ta December, has been persuaded to remain until the close of the school year in June.

-Mr. John J. Schobinger, principal of the Harvard School and connected with educational work in Chicago for more than fifty years, died October 23, after a year's illness.

An Application of Statistical Methods to Attendance Problems

Frank M. Phillips, Bureau of Education

Statistical methods have changed materially since the beginning of the war in 1917. The antebellum statistician threw his figures into a table, lit his pipe, and then discussed something else. The modern statistician begins where the other left off. He now has an abundance of statistical tools which enable him to analyze data for trends and tendencies, relationships, reliability, and to make forecasts. These tools are mostly applications of arithmetic, but great care needs to be taken in selecting the tools to be used.

The statistician of today has a new task, that of writing up a report in terms that can be understood by persons other than statisticians. The old-time statistician had no such problem, he had very little to say, and he could speak only in the language of the layman.

The Problems of the Attendance Officer

In dealing with problems of human behavior, the investigator cannot set up his experiment with the same care as does the physicist, the chemist, or any other exact scientist. If the electrician wishes to determine the resistance of a coil, he selects at will such items as temperature, size, and material of conductors, amount of known resistance, condition of Wheatstone bridge and switches, and delicacy of ammeter, and then he repeats the experiment as often, and under as many different sets of conditions as he wishes. In other words, he sets the stage.

The student of attendance problems does not have any such opportunities for selection. He must accept the conditions as society has created them. Many of the factors with which he must deal are intangible, and many others do not lend themselves to statistical analysis, nor even to positive identification. The human element reacts differently at different times, even to what appears to be the same stimulus. Matters of choice are often determined by factors that are unexplainable even to the chooser. Action is sometimes a matter of suggestion, occasionally of coaxing, and at times of compulsion. Often it is the personality (whatever that is) of the attendance officer or of someone else with whom the children come into contact, that wins. The attendance officer can only try something and note results. That something needs modification and revision in order to have the desired effect upon different groups of children. While that particular something is in effect, all other known and unknown factors are functioning at one and the same time. The effect of a single desirable factor may be nullified by the effect of one or more undesirable factors, and the desirable factor goes into dis-

It is difficult, therefore, to outline in advance a program of procedure that can be followed with exactitude in any study of attendance problems. It is much simpler to write a word of caution not only regarding methods of attack, but concerning interpretations to be given to results. The remainder of the discussion will set forth some of the results that research and statistical investigations of various kinds have brought to light regarding the legal status of, and the values to be derived from, school attendance.

The History of Compulsory-Education Laws A recent study of the laws regarding truancy and compulsory education shows that the first truancy act in the United States was passed in

¹Abstract of a paper read before the National League of Compulsory Education Officials, Cincinnati, Ohio, October 26, 1927.

Massachusetts in 1850.2 This was followed in the same state with a compulsory school-attendance law in 1852. Compulsory-education laws followed in all the other states until in 1918 the last one was passed. The average compulsory age limits in the various states at the present time are from 7.4 years to 16, making an average of 8.6 years of schooling required. The average length of the school year required for compulsory attendance is 7.2 months, which would make the total time required amount to approximately 7 years of 180 days each. This is about the amount of public-school training that our children are getting at the present time. Four states excuse children from compulsory attendance after they have completed the high school, 39 after completion of the elementary school, and 6 do not specify any educational attainment.

The average attainment as a minimum requirement for granting labor permits in the states is the completion of the fifth grade. This varies from no requirement in 8 states to an eighth-grade requirement in 17 states. Eight states require the ability to read and write. The states that provide for the education of dependent and neglected children number 33, and those that permit such training number 14.

In all, 38 states require an annual school census, one requiring a continuous census. Other states provide for a school census every 2, 4, or 5 years excepting 2 states which make the census subject to call.

The Selection of Attendance Officers

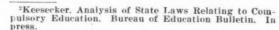
The selection of attendance officers by counties is provided for in 21 states, and by districts in 39 states. In 36 states the salary of attendance officers is fixed by the appointing body, the range varying from \$2 to \$5 per day. Attendance officers are required to act immediately, or within 24 hours in 15 states, and in 2 states within 3 days. Power to arrest delinquent pupils is given in 24 states; 16 provide a penalty for teachers and principals that fail to report absence; 19 have a penalty for attendance officers who fail to act, and all states provide a penalty for parents who foster truancy.

Improvement in Status of Compulsory Education

While conditions favoring compulsory education in the states have been improving, the effect of the efforts put forth by the states, as well as the more favorable attitude toward education by the general public, and by those of school age also, have tended to produce a more fertile field for schooling of all kinds. Improvement in conditions of sanitation and health, in transportation, and in the circulation of reading matter, all contribute to better schools and more training

Factors Favoring Increase in School Population

During the past 50 years the death rate in the United States has been reduced from approximately 20 per thousand to about 12. The average length of life has been increased during this period about 16 years, to an average of 56 years. This does not mean that 16 years more of old age have been added, but 16 more years of productivity. Much of the increase is due to reduction of the infant mortality rate. Complete figures for infant mortality do not exist farther back than a dozen years, but if data from Massachusetts may be taken as a fair sample of the United States as a whole, infant mortality has been reduced from 160 per thou-





MR. CHARLES L. MOSHER.
Director of Attendance for New York State
Department of Education,
Albany, N. Y.

Mr. Charles L. Mosher, formerly superintendent of schools at Saratoga Springs, N. Y., has been appointed director of the attendance division of the New York State education department.

Mr. Mosher comes to the department after a long and successful experience in schoolwork in the state. He is a graduate of Hamilton College, Cornell University, and Columbia University, and holds degrees given by Hamilton College. After graduation he held a number of supervisory positions in Canton and Herkimer, N. Y. In 1910 he was appointed to a position in the state education department, which he held until 1915 when he took a teaching position at Utica. Later he was elected superintendent of schools at Saratoga, where he was especially successful in the development of a progressive and efficient school system.

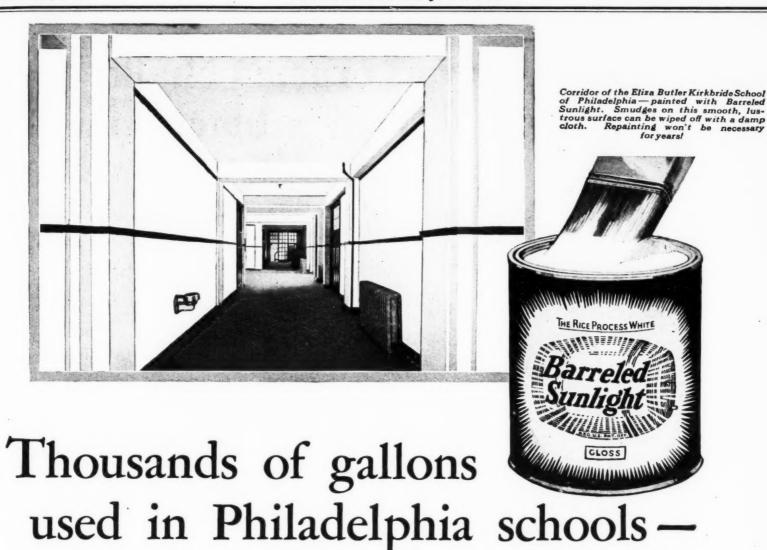
As director of the attendance division. Mr. Mosher will have charge of the supervision of the enforcement of the compulsory-attendance laws and of the agencies connected with the work. The division also assists local authorities in enforcement and does some work in the field of child accounting.

sand to 75, within the past 25 years. More infants are being saved for the period of childhood and youth. While the birth rate has been decreasing rather rapidly during the past few years, better care has had the effect of keeping a larger percentage of children alive until the school age is reached. The number of children of school age is therefore still on the increase. Although the per cent which the school population is of the total population in the United States has decreased from 31.3 in 1870 to 26.6 in 1920, there are about 30½ million children of school age, that is, 5 to 17 inclusive, in the country today.

Again, even though the children do not hold their former proportion of the population, the per cent of the whole population enrolled in the public schools has increased from about 18 per cent in 1870 to about 22 per cent today. The length of school life has increased from 208 days in 1840 to 582 in 1870, to 770 in 1890, and then to 1246 in 1924. Measured in 180-day years, school life has increased from a little over 4 years in 1890, to a little over 7 years in 1927.

While trends show that school attendance and length of the school year are improving, and quite satisfactory today, a large number of children of school age are not found in school. Of the $30\frac{1}{2}$ million children, about $23\frac{1}{2}$ are in average daily attendance in either public or private elementary and secondary schools. Of the 7 million not present every day, some 4 million to 5 million have either completed school, or are enrolled but not present. At least $2\frac{1}{2}$ million children need the attention of an attendance officer, as they do not pretend to go to school at all.

(Concluded on Page 100)



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KIT

Industrial Cleaning Materials and Methods

(Concluded from Page 98)

The Advantage of More Education and Cost to **Taxpayers**

Let us suppose that the attendance officer were able to become 100 per cent efficient in his efforts to get all children of school age to attend school daily. Three questions arise: First, is the present generation capable of more schooling? Second, is further education of the children a desirable asset for the state to consider? Third, are we able to finance the schools for an increase in attendance of approximately 20 per cent?

Concerning the first question, the studies of Freyer,3 and others interested in intelligence tests tell us that there is no necessity of having an illiteracy greater than 1 per cent. The amount of illiteracy was, in 1920, about 7 per cent among those 21 years of age and over. The general population is capable of about 4 years more of schooling than they are now getting, which would put the average student through the high school instead of allowing him to stop at the seventh grade. Surely the schoolboy and girl of today are capable of more school training than they are getting. Let us not slow down in effort, because of any question concerning the ability of school children.

The answer to the second question is short: States and nations are prosperous in proportion to their education. More education is desir-

The third question is difficult to answer. There is still considerable congestion in schools of the cities. Just how much at the present time no one is prepared to say. However, the inclusion of an additional 5,000,000 children would bring about the necessity of at least 5,000 more buildings, at a cost of 1,500 million

To maintain, and operate the new schools with a sufficient number of teachers would cost annually about 500 million dollars. This in addition to the 2 billion dollars now spent annually for public-school education is a problem in finance, somewhat removed, although related to attendance problems. Few of us have the courage to face the taxpayer with a proposition that would increase the annual per capita of population expenditure for public education from \$17 to \$22. Perhaps the old slogan of "a seat for every child" will have to be replaced with something more modern, and less expensive. Superintendents of platoon schools tell us that we can house in existing buildings from 30 per cent to 40 per cent more children than we are now housing. If greater use of the school plant is possible to the extent indicated, that ought to take care of any congestion now existing, and of the non-attendants as well. Most school administrators will welcome the problem, and the taxpayer can be depended upon to listen to any proposition that calls for a wise expenditure of public funds.

These three questions can be answered favorably. The place for the boy and the girl of school age, if physical and mental conditions are favorable, is in school. Statistical and other investigations all show that education is an asset that has no substitute. The business of keeping 30 million of our youth in regular attendance at school is unselfish in its motive, dignified in its relations to other kinds of work, and vital to the nation's welfare.

ASSOCIATION ELECTIONS

-W. E. Nelson, principal of the Quincy High School, was elected president of the western division of the Illinois State Teachers' Association. Other officers elected include C. F. Miller, superintendent of Galesburg schools, vice-president; Miss Helen Rothgeb, Quincy, secretary, (reelected); A. E.

Decker, Carthage, treasurer, (reelected).

—Elmer A. Grodeon of Marissa was elected president of the St. Clair county (Ill.) Teachers' Association. Other officers: H. B. Calhoun, Belleville, first vice-president; Miss Ida Starr, Oak Hill, second vice-president; Miss Belle Haser, Belleville,

-Mrs. Alice H. Pendroy was elected president of the Compton City, California, teachers' club; vice-president, Miss Gladys Ensign; secretary, Mrs. Ruth Lefener; treasurer, Mrs. Ida V. Clark.

—J. F. Smith, of Bellows Falls, was elected president of the Schoolmasters' Club of Vermont. Other officers elected were: E. L. Clark, superintendent of Richmond schools, vice-president; N. B. Burbank, of Burlington, secretary-treasurer. Memburbank, of Burlington, secretary-treasurer. Members elected as an executive committee were J. H. Wright, principal of the Enosburg Falls High School; H. B. Swicker, superintendent of the Bennington schools, and D. S. Jones, superintendent of schools at Johnson. Sidney C. Harding, of St. Johnsbury, the retiring president, presided at the meeting as to astmoster. meeting as toastmaster.

-Miss Elizabeth Bowers of Ottawa was elected president of the Illinois Valley division of the Illinois State Teachers' Association. John W. Graham, of La Salle, who last year was a member of the resolutions committee, was elevated to the vice-presidency. Secretary Sherman Littler, of Henry, and Treasurer T. N. Kennedy, of Granville, were reelected to their respective offices.

E. A. Grodeon of Marissa, Ill., was elected president of the St. Clair County Teachers' Association. H. B. Calhoun of Belleville was elected first vicepresident, Ida Starr of Lebanon, second vice-president, and Miss Belle Hauser of Belleville, secretary.

Alvin S. Eyster of Fort Wayne is the new president of the Northeastern Indiana Teachers' Asso-

-Principal J. M. Campbell of Sedron Woolly was elected president of the Skagit county, Wash., educational association. Superintendent A. A. association. Superintendent Schoffen of LaConner was elected secretary, and Maurice Windus of Mount Vernon was elected

-Alfred F. Wicks, principal of the high school at Warrenton, was elected president of the Clatsap County Teachers' Association. Edith Lee Wilson of Warrenton was chosen secretary.

³Vocational Self-Guidance, Douglas Freyer, N. Y. Univ. 1925, Lippincott.

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ize that the water closet is the most important school sanitation fixture. Children don't know how health is endangered when the closet stands unflushed—sending forth disease-bearing flies, and bad odors.

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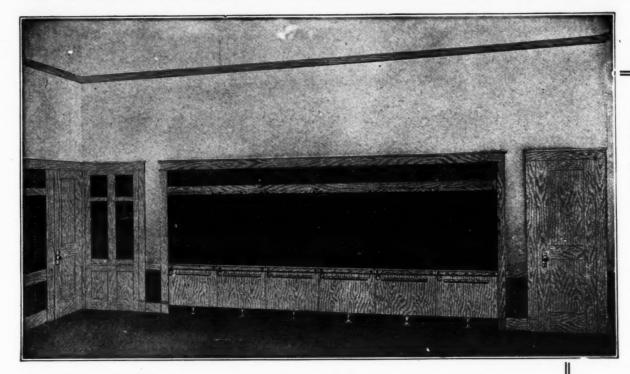
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HIGH-SCHOOL ADMINISTRATION
—The school board of Boston, Massachusetts, has appointed eight advisers of girls, five of these to be located in the strictly girls' high schools and three in the large mixed high schools. The appointments were made after more than a year's study of the problem of girls' advisers and after suitable standards had been set up to govern the selection and appointment of these women. The new appointees will work with the college advisers and with vocational counselors, and will cooperate with the home in securing the best school adjustment for the child. The duties of the girls' advisers are as follows:

The adviser is a teacher-at the option of the principal she may be called upon to teach in the subject for which she has been prepared.

2. She shall have general supervision over extra-curricular activities. Today, we have in our high schools various lines of work, carried on in the afternoons, which touch the girl's life interests and build those interests into her academic studies. The dramatic club, the debating club, the orchestra, the glee club, the athletic association—all these the adviser supervises, and directs the girl student into the wise use of her time and talents.

3. She shall supervise all social activities carried on in the name of the school. Careful chaperonage of social activities, is the function of the adviser. She will see that these affairs are carried on in such a way that parents will approve of their children's attendance. Evening dances carried on in the name of the school are forbidden by the regulations of the school committee, but social affairs of the afternoon will be most carefully supervised by the adviser as a member of the high school

faculty.

4. She shall serve as adviser of girls for all colleges and higher institutions of learning. No one can advise a student concerning college require-ments and college admissions as well as the adviser, who must make herself familiar with all the machinery of college admissions. She is thus equipped to advise the girl so that she takes no false steps and wastes no time as she follows a definite course toward her objective.

She may give advice on dress and manners to girl students. Surely, in these matters the word of suggestion and direction is needed today.

She shall serve as a consultant to the headmaster on all matters relating to the discipline of girls. In every case of school discipline referred to the adviser she shall act as counsel for the defend-She is the friend of the girl, to plead for her, to advise with her. She will cooperate with room teacher, with parent and with headmaster in doing everything that will make the girl the right type of student in the school.

7. She will advise the girls concerning their home lessons, teaching them how to study in order that their home study may be successful. She will find the reasons for students' failures in academic studies, and with the cooperation of the classroom and subject teacher, the adviser will try to help these students to successful achievement and to better school records.

The adviser's concern is with the problem of the girl in school. She will help the girl to the wisest and best use of her time, to the cultivation of her talents, and to fine achievement in her high-school

THE STATUS OF TEACHING IN NORTH CAROLINA

The state education department of North Carolina, in a recent circular, gives some interesting statistics on the status of school teachers in the The report shows that there were 23,448 teaching positions in North Carolina during the school year 1926-27. Of this number, 17,705 were held by white teachers, and 5,743 by colored teachers. Divided on another basis, 17,517 were positions in the rural schools, and 5,931 in the city schools.

During the past year there were a total of 20,933 teachers in possession of standard certificates. This number represented 89.29 per cent of the teaching personnel of the state. In 1919-20 less than per cent of the teachers employed held certificates based on training equivalent to graduation from a high school or better.

is shown that of the 17,705 white teachers employed, 13,163 taught in rural schools and 4,542 taught in city schools. In the white rural schools nearly $4\frac{1}{2}$ per cent of the 1926-27 teachers are at the nonstandard level, whereas only ten teachers, or .2 of one per cent of the city teachers are at this level. At the "elementary" level are 46 per cent of the rural white teachers, and 6 per cent of the city teachers. At the "above elementary" level are $49\frac{1}{2}$ per cent of the rural teachers and over $93\frac{1}{2}$ per cent of the city teachers.

Since 1921-22 the number of white teachers has increased to 17,705, or 16 per cent. The number of colored teachers has likewise increased from

4,544 to 5,743, 1,199, or 26 per cent. The percentage of white teachers holding nonstandard certificates has been reduced from 19 per cent to 3 per cent, and the percentage of colored teachers from 51 per cent to 33 per cent. This is considered a remarkable improvement, not only because of what has taken place, but because it appears to be continuous.

Of all the certificates open to teachers in the state, the elementary B certificate appears to be the most popular in the schools. A total of 4,683 teachers, or nearly 20 per cent of those employed, hold elementary B certificates. In the city white schools, the largest percentage of teachers hold high-school-A certificates. In the rural white schools, the largest percentage of teachers hold elementary B certificates, or nearly one fourth of the total. In the colored schools, the largest percentage of rural teachers hold elementary B certificates, while the largest number of city teachers hold elementary A certificates.

—Los Angeles, Calif. Under a ruling of the high-school girls' league, uniform dress is required for high-school girls. The uniform consists of a white middy blouse with navy-blue collar and cuffs, and a navy-blue skirt. Senior-A students are not required to wear the senior outfit. Failure to obey the rule will bring offenders before the dress advisory board.

-Supt. R. W. Hyndman of Canton, Illinois, in report to the board of education on the subject of retardation, offers an excellent showing in favor of the Canton schools as compared to other cities of the same size in the state.

The report shows that in 1922-23 there were 50.6 per cent of normal pupils, 4.8 per cent of accelerated pupils, and 44.6 per cent of retarded pupils. In 1927-28 there are 12.1 per cent of accelerated pupils, 1921-28 there are 12.1 per cent of accelerated pupils, 62.5 per cent of normal pupils, and 25.4 per cent of retarded pupils. Since 1922 there has been a gradual increase in the percentage of accelerated and normal pupils, and a steady decrease in the percentage of retarded pupils. The average for cities the size of Canton is 2 per cent accelerated, 66 per cent power and 22 per cent accelerated. 66 per cent normal, and 32 per cent retarded.

-The annual convention of school boards of Door county, Wis., was attended by 300 delegates. The speakers were Miss Lillian Anderson, county superintendent; Dr. F. F. Bowman, state board of health, and Supt. William J. Gilson.

for

Comfort

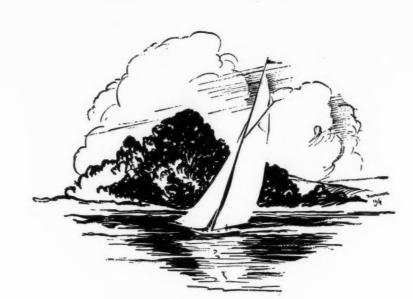
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Health ****

Durability,

Economy

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PIONEER MANUFACTURERS OF PLUMBING FIXTURES FOR SCHOOLS

NEWS OF THE SCHOOL BOARDS

—F. W. Steffen, a member of the board of education of Cleveland, Ohio, resents the so-called "tax retrenchers" of the city who are criticizing the school officials for holding to an adequate school-building program. Mr. Steffen says: "You will find that most of them are trying to evade taxes at the expense of the children. They believe that our children are far too good for the children of ordinary people. They believe in going back to the old ideas of serfdom-opportunity and schooling for the rich, but ignorance and unskilled labor for the poor."

—"Every town should have a woman on its school board and it is the club woman's job to see that this is brought about." This is the recommendation made recently by Mrs. Grace S. McClure, president of the Saginaw, Michigan, board of education, before a body of club women. Mrs. McClure asserted that there are three reasons for the rapid increase in educational costs, the higher general cost of all governmental operations, the increase in the number of children to be educated, and the improvement in the quality and extension of the kinds

of education offered the children.
—State Commissioner Elliott of New Jersey has ordered the reinstatement of Mr. Edward A. Nelson as secretary of the Bayonne school board and payment of his salary from May 19, when he was dismissed, at the rate of \$5,000 a year. Mr. Nelson had been named as secretary in May, 1926, but a new board which went into office in February, 1927, removed him and gave the place to J. A. Skelenar. Dr. Elliott held that Mr. Nelson's appointment had been ratified by failure to remove him until more than three months after the new officers took charge of the school affairs.

of the school affairs.

—Prof. David S. Muzzey, author of Muzzey's history text, which was branded as pro-British by Mr. John J. Gorman, aid of Mayor Thompson of Chicago, has brought suit for \$100,000 against the latter. The suit will no doubt be followed by others on the part of authors and publishers who are preparing to defend themselves in court against the charges previously made by Gorman in his report to the mayor.

Prof. Muzzey will offer evidence to prove that Gorman's charges were distorted and the text maliciously misconstrued. Sentiments in the report, it is contended, were those of King George III and were reported as coming from his lips.

—President Ben Weidle of the St. Louis, Mo.,

-President Ben Weidle of the St. Louis, Mo., board of education has announced the appointment of new standing committees. The committees are as follows:

Instruction—Henry Heler, chairman; A. S. Werremeyer, and Arthur Blumeyer.

Finance—Arthur Blumeyer, chairman; Richard Murphy and Henry Schroeder. School Buildings—Louis Scholimeyer, chairman;

Emil Barth, and Dr. David C. Todd.

Auditing and Supplies—John C. Tobin, chairman; Mrs. Elias Michael and M. R. Rollins.

—Oneida, N. Y. More than 100 teachers and members of their families were guests of the board of education at the annual reception held on October 19 at the Oneida Hotel. Mr. H. D. Fearon, president of the board, was introduced to the new members of the teaching staff by Supt. A. H. Covell. Mr. Howard Knapp of the Oneida High School spoke for the teachers.

—The school board of Evansville, Ind., has been ordered by the court to pay to John W. Spencer \$500 and interest representing his salary for half a year as school attorney. Spencer was removed from office before his year was up and was succeeded by Isidore Kahn.

—The school board of Marion, Ill., has adopted a "hands off" policy in the matter of week-day religious education. The board permitted the dismissal of schools earlier on days when the church schools are held but has left the matter of attendance to the parents. The religious classes are conducted at the different churches and the pupils attend the church of their choice.

—The school board of Ft. Wayne, Ind., has been sued for \$125,000 by the building contracting firm of Max Irmisher & Sons, who built the North Side School last summer. The contractor and the architect were recently made defendants in a suit for \$151,000 brought by the school board.

—Upon the suggestion of Henry Schroeder, a member, the St. Louis school board has ordered that board members be provided with gold-plated identification badges. The badge consists of a circle bearing the seal of the board and a bar upon which

are engraved the name of the member, the date of election, and the year his term expires. The badges were ordered as a result of difficulty which the members had in passing police lines after the recent tornado.

—The school board of Knoxville, Tenn., has terminated an agreement with the library board and has assumed complete control over all school libraries. In taking over the control of the school libraries, the board aims to reorganize the libraries to make them study rooms as well as places in which to obtain books.

—A school safety patrol system will be placed in operation at Springfield, Mo. The establishment of the system follows a survey of school buildings of the city by the police department as a means of determining where protection from traffic is needed.

—The school board of Kansas City, Kans., has notified principals of the schools that the rule relative to secret societies is in effect and will be enforced as in the past. All students were asked to sign pledges and to cooperate with the rules of the board.

—At Troy, Ala., the school board has discontinued tuition fees for elementary school pupils.

—The school board of Elkhorn, Ill., has raised the tuition fees for nonresident pupils to \$1 a week for the grades, and \$3 a week for the high school.

—Owosso, Mich. The board of education has prohibited hazing of freshmen in the high school. In the past hazing activities have resulted in injuries to students.

—South Bend, Ind. The school board has approved plans for an addition to the school administration building, to be erected at a cost of \$5,430.

—Mayor Fred Baxter of Superior, Wis., and the deposed appointive school board were recently losers in their efforts to stop a municipal election and to depose the elective school board, in a ruling given by the circuit court at Ashland. Both the mayor and the old school board are expected to appeal the case.

The old school board challenged the legal powers of the elected board chosen at a special election during the summer following a six months' controversy. On complaint of the new board, an injunction was issued restraining the old board from acting, even after the new board was installed.

(Concluded on Page 106),

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DRINKING FOUNTAINS



(Concluded from Page 104)

—A survey of the school plant of Oklahoma City, Oklahoma, has been made under the direction of R. F. Williams. The survey included a study of the trend in population of the city and the adequacy of the present buildings to house an increase in students.

—The school building department of the St. Louis, Mo., board of education went into action immediately following the tornado which struck the city the latter part of September. The building department made a survey of the situation and estimated that the buildings had suffered damage to the extent of \$1,500.000. The report showed that two buildings were damaged beyond repair, six had lost cornices, roofs, or other sections, and one building required a further inspection to determine whether it was worth rebuilding. The casualty list of the schools included 6 dead and 23 injured, which was remarkably small in view of the fact that 7,000 students were exposed to the storm. The board of education has appropriated \$120,000 for the work of removing the debris and repairing damages.

-St. Louis, Mo. The school board has voted to retain its present rule providing for compulsory vaccination of school children.

vaccination of school children.

—Mr. E. W. Anderson, assistant attorney general of Washington, has given an opinion to the effect that an alien may not hold a position as member of a school board. The opinion was given to a county superintendent of schools who asked for authority in appointing two aliens to fill vacancies on the board.

—Chicago, Ill. The board of education has been asked to approve a recommendation of Mr. John A. English, chairman of the purchasing committee, providing for the creation of a bureau for testing school supplies.

The new bureau is to be a technical laboratory, which will test coal and other supplies purchased by the board. It is expected that the bureau will be in charge of an expert who will have the equipment necessary to insure materials in accordance

with specifications.

—Peoria, Ill. Two students of the high-school football team have been barred from the team for failure to obey a rule prohibiting membership in secret societies.

cret societies. —Maplewood, Mo. The parent-teacher association has asked the board of education to approve regulation uniforms for high-school girls. Under the plan, girls of the junior high school will wear a white blouse, a blue skirt, and red tie. Girls in the senior high school will wear a white blouse, a blue shirt, and a blue or black tie.

—The question whether states can prohibit children of other races from attending schools for white children is to be decided by the Supreme Court at Washington, D. C. The case arose in the Rosedale district in Bolivar county, Miss., where the school authorities required a child of Chinese descent to attend a public school provided for regrees.

attend a public school provided for negroes.

The counsel for the school authorities insisted that state laws for the segregation of children by races were valid, and that a child of Chinese parents must go to a school provided for negroes.

ents must go to a school provided for negroes.

—George E. Scollen, 74, a member of the east side board of education at Saginaw, Mich., for nine years, died October 26, after a brief illness. As a member of the board, Mr. Scollen had been active in the erection of the manual-training building and had served on the building committee. Since 1913 he had filled the office of supply clerk.

—The attorney general of Oregon has ruled that the time that a child excluded from school because of a contagious disease shall be allowed to resume his studies is discretionary with school boards. It was also held that school boards are not compelled to readmit children to school upon the certificate of a health officer. The opinion is not expected to conflict with the recent decision of the court involving the validity of a law authorizing city or county health officers to examine pupils suspected of being in an insanitary condition.

WHAT IS GENIUS?

We are wont to say that the true teacher like the true genius in any field of human endeavor is born not made. But that expression like many another which rolls glibly from our tongues leaves much to be desired. An instinctive love of music alone justifies no one in an attempt to interpret the passages of a great composer; nor love for the healing art fit one to practice medicine. Modern teaching is as truly a learned profession as is any other.

-William Mather Lewis.

—Leavenworth. Kans. The school board has taken definite steps to reduce the traffic dangers for small school children. An order has been given to the manual-training department to construct 23 safety stop signs for the use of juvenile traffic officers. Elementary schools will be dismissed ten minutes earlier at noon to permit the pupils to reach their homes before the heavy traffic at 12 o'clock, and will open ten minutes earlier in the morning. It was decided that the noon hour was the most dangerous of the day and by dismissing the pupils ten minutes earlier, it is believed that much of the traffic danger will be avoided.

—Deputy counsel E. R. Purdum of the attorney general's department of California, has ruled that under the provisions of the law, boards of education may legally engage in the operation of school cafeterias. The ruling lends stability to the school cafeteria business in California and gives it a legal basis for operation. Up to this time the operation of school cafeterias has been a precarious business because the administering body was not organized to assume the legal responsibilities connected with the operation of a cafeteria.

—Deputy state superintendent C. L. Goodrich of Michigan, speaking recently on the new school code of the state, pointed to the enlarged powers of school boards and superintendents under the code. The board has the authority to suspend or expel from any school under its rule any pupil guilty of gross misdemeanor or persistent disobedience, or one having habits or bodily conditions detrimental to the school, he said. Whenever in its judgment the interest of the school demand it, the board has the power, he declared.

The boards may employ additional assistants and employees as may be necessary.

As for compulsory education, the boards may require a certificate showing that the pupil is regularly employed at some lawful work before they need issue an excuse if more than eight grades are maintained by the district, Mr. Goodrich declared.

Any school district may bond for the completion of such school buildings under the course of construction and additions to schoolhouses, the remodeling or addition of heating plants to the buildings already completed, he pointed out as he referred to a number of other changes which have been made.

×

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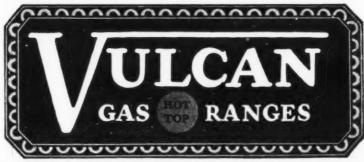
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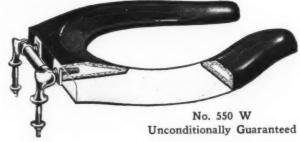
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COUNTY EDUCATIONAL CONTROL IN THE UNITED STATES

Mr. Julian E. Butterworth of Cornell University, writing in the *Journal of Educational Research*, discusses "Types of County Educational Control in the United States." Mr. Butterworth points out that there have been three main sources of confusion in the use of the term, county unit. In the first place, the degree of control which the county should exercise over the schools within its borders has not been exactly defined. The extent to which control varies under present conditions is illustrated in a study of the three states of Maryland, Alabama, and Montana. In Maryland, the county is divided by the county board of education into districts which are controlled by trustees whom the board appoints. The trustees act as custodians of the buildings, exercise control over the pupils, and have some voice in the selection of the teachers. In Montana, the subdistrict of the county rural district has a board of trustees elected by the people. These trustees select the teachers, control the pupils, administer the buildings, recommend the budget, and raise additional funds

A second point of confusion is found in determining what communities should be under the jurisdiction of the county in order to make a county unit. All villages and cities in Maryland, with the exception of Baltimore, are included in the county-unit organization. A different type of county unit exists in Alabama, where a city of one thousand or more may be excluded from the county-unit scheme.

Some confusion has resulted from a failure to distinguish between the degree of control which is necessary to make a county unit and the organization which is desirable to bring about the effective functioning of the units. In the so-called countyunit state of Florida, the county superintendent is elected by the people, while in the noncounty-unit state of Ohio he is appointed by a county board. It is evident that there are two factors in making an effective county unit the degree of control exercised and the form of organization needed to make that control function wisely. Of these factors, the degree of control to be given the county should first be determined, then the organization set up.

Mr. Butterworth holds that before a true evaluation of the influence of county control in a particular state can be made, it is necessary to have the detailed facts regarding the legal authority of the state. A classification which reveals significant differences in the state was made on the basis of the degree of control to the county and the nature and size of the communities within its orders to which this control extends. Under such a plan there is a separation of the problem of the degree of control from the problem of devising an effective organization. The various groups are designated as types in the following outline:

- Type 1. County unit of the strong type:
 - County controls all policies
 - All communities are included except cities.
 - There are no lesser boards in the county district except those having advisory, clerical, or custodial functions only.
 - States included in this group: Louisiana, Maryland, Utah.2
- Type 2. County unit of the strong type: Control-similar to Type 1.
 - The communities included are usually common-school districts and small villages.
 - 3. Lesser boards-similar to Type 1.

²In Utah, the local school district is the county in 24 cases, while in 4 cases the county is divided into 2 districts, and in one case into 3 districts. There are 5 districts in cities having a population of more than five thousand.

³Towns of six thousand population in one of the counties may be independent of the county organization, while in the other counties the limit is two thousand. One county has a county and city organization. In 1924-25, the state report showed 28 towns having populations between one and two thousand which had an independent organization,

- States included: Alabama,3 Florida, Georgia,4 Kentucky, New Mexico, North Carolina, Tennessee,5 and Vir-
- ginia.

 Type 3. Semi-county unit or county unit of the weak type:
 - 1. Considerable authority is allowed the county, but at least two of the following: selection of teachers; financing schools; and control of such policies
 - as consolidation, curriculum, etc. Communities included—usually as in Type 2.
 - There are lesser boards within the county district.
 - States included are Montana (optional),6 Nebraska (optional),7 Oregon (optional),8 South Carolina.
- Type 4. Noncounty unit among the states but usually the Varying degrees of control exist
 - county plays only a minor part. Communities included—usually as in
 - Type 2. There are lesser boards within the county district.
 - States included are Ohio, Mississippi, and other states with the county as a school unit.

Type I of the proposed grouping includes those states in which the county has control of significant policies in all communities of the county except the large cities. All the cities in Louisiana are included, although Orleans parish, in which is located

cluded, although Orleans parish, in which is located

*Four countries have an organization of Type 1. In
the other countries all places of two thousand and more
are independent and smaller places may be if granted
a special charter by the legislature.

*Any incorporated town may be independent of the
county board. There seems to be no minimum population requirement for incorporation. According to the
state educational department 29 per cent of the 95
counties do not have a city or incorporated town. In
1922 there were 322 city schools in which were employed about one third of all the teachers and pupils
in the state.

*Only one county is organized under this law. The
other counties should be classified under Type 4.

*Although the law has been on the statute books for
a number of years, no county has yet accepted its
provisions. Actually the state should be classified
under Type 4.

*Three counties organized under this law. Other

*Three counties organized under this law. Other counties belong to Type 4.



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New Orleans, has some special legislation. All Maryland cities except Baltimore, are a part of the county organization, while in Utah only places of more than five thousand are independent. In county-control states of the first type there is no lesser board, or if there is one, it is usually appointed by the county board and its functions are merely advisory. It should be noticed that only in the state of Utah is every element of control assumed by the county, and even there a county is sometimes divided.

In Type 2, the county exercises all significant functions except in the villages, which are given complete or large independence. In Alabama, towns of one thousand or more may vote to become independent of the county. A graded common-school district to be independent, in Kentucky, must have at least 75 census pupils and maintain schools of a specified standard. A town of five hundred in Virginia may perform certain functions subject to the county board, and in Florida, a district of any size may levy a special tax, thus securing a degree of independence.

A careful analysis of the four types of control, reveals some significant differences. Types 1 and 2 constitute cases where the county is considered as the local unit. This is because the entire county, except where some of the larger villages and cities are exempted, exercises those forms of control ordinarily expected of a local unit. In Type 3 and Type 4, however, the county is divided into smaller legal units which exercise many of these major functions. The county still has, in these two forms, some authority and responsibility, but because it functions between a local unit and the state, it is called an intermediate unit.

A significant difference between county control of Type 1 and that of Type 2 is noted. In the former, there is no lesser unit than the county, except in the case of the larger cities, with a significant degree of control, while in the latter, the larger villages—some are, in fact, quite small—are partly or largely independent. In the latter situation, there is a separation of a village and its contributing rural territory.

In most of the states of Type 4, it appears that the constituent districts are attempting to perform some duties that they are not able to do well, and that educational effectiveness would be promoted if they were transferred to the county. This by no

means warrants the conclusion that all control should be transferred.

In concluding, Mr. Butterworth holds that an attempted evaluation of the four types of county control is not possible in this article. The type to be preferred varies among the states according to conditions, and even within a single state, it may be desirable to have more than one of these types. The important consideration is not to seek the establishment of one type or another, but rather to set forth the objectives of a good school unit and to provide that type of unit which most nearly approaches the accomplishment of good results.

CLEARING HOUSE ON RESEARCH WORK IN EDUCATION

A clearing house on current research work in education was organized on October 1 by the United States Bureau of Education for the purpose of aiding universities, colleges, and other agencies in the elimination of wasted effort and the duplication of educational problems.

The clearing house is expected to terminate much of the lost energy and motion developed as a result of the duplication of activities by institutions of higher learning. A comprehensive list has been made of the higher educational institutions and agencies engaged in original studies of educational

questions or preparing works on such subjects.

In the establishment of this type of clearing house, all educational research agencies will be in a position to obtain first-hand information on research work in education and in arranging for new studies will be enabled to ascertain whether they are duplicating studies already conducted. The work will be performed by the present staff of the bureau in addition to their other duties.

SCHOOL LUNCH DETERIORATES DUE TO RISING COSTS

A school-lunch survey committee which recently made a study of the school-lunch service in New York City has presented its report to the board of education. In its report the committee has made criticisms of the organization under which lunches are sold to the pupils and charges distinct deterioration in the quality of the food served.

After considering the need for a reorganization of the work, the committee calls attention to the serious lack of adequate supervisory authority, and to a distinct deterioration in the quality of the food, and to increases in operating costs without an expansion of the service. The lunch service is usually in charge of a teacher-at-large, who is

without the requisite authority and no supervisory assistance is provided.

The committee has reported as a result of its study, that the 44 school lunchrooms turned over to the board of education in 1919 have decreased to 27, and that the budget provision has increased from \$50,000 to \$78,000. The number of concessionaries has increased from none to 53, while the food served is unwholesome and unsupervised. The committee concurs in the opinion of expert dictitians and directors of school lunches that the school lunches in New York City can be made self-supporting with the exception of administrative overhead.

PERSONAL NOTES OF SCHOOL OFFICIALS
—Francis L. Bacon, of Newton, Mass., has been chosen principal of the J. Sterling Morton High School at Berwyn, Ill.

—Prof. Fletcher H. Swift of the school of education of the University of California, recently entertained Dr. Lotus D. Coffman at a luncheon. Those present at the luncheon were Fred Hunter, superintendent of schools, Oakland; H. B. Wilson, superintendent, Berkeley; J. M. Gwinn, superintendent, San Francisco; W. W. Kemp, dean of the school of education; Robert G. Sproul, and Dean C. B. Lipman.

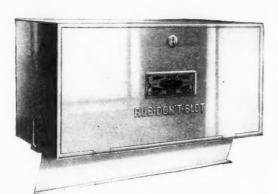
—Mr. F. H. Barbee, formerly principal of the Northeast High School at Kansas City, Mo., has been made assistant superintendent of schools.

—George Morris, supperintendent of North Attleboro, Mass., was elected president of the Bristol County Teachers' Association. Others elected were: William F. Eastwood of Attleboro, Arthur C. Mott of North Attleboro, and Florence McNamara of Taunton, vice-presidents; Miss Mildred V. Carroll of Fall River, secretary, and Charles A. Hathaway of Taunton, treasurer.

—Thad Byrne of Colfax was elected president of the Whitman county, Wash., education association. Chester D. Owen, also of Colfax, was chosen secretary.

A CORRECTION

In an editorial which appeared in the October School Board Journal it was stated that John H. Logan, state commissioner of education, had relinquished a salary of \$5,000 to accept the superintendency of Newark at a salary of \$15,000. This statement was not entirely correct. Since 1911 when Governor Wilson appointed Calvin M. Kendall of Indianapolis to the position the salary has been \$10.000 per annum. It has not been raised since that time.



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makes them
most handy to use
and also saves
wastage from
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Handling the Money from Student Activities

Principal V. I. Brown, Arlington Heights, Ill.

"Do you know what that fellow is doing? He is taking his two per cent discount on all his bills for football supplies. He isn't a school teacher. He's a business man."

The above remarks made by the head of a large athletic-supplies house to one of his salesmen was reported to me by the salesman. Both the salesman and his employer seemed astonished that any schoolman should discount his bills for athletic goods, or that he should give evidences of being a business man.

Now every school finds it necessary to handle quite a few accounts during the school year; some of these run into rather tidy sums, and all are entirely independent of the regular funds of the district raised by taxation and under the direct control and supervision of the school board. Some boards require an exact accounting of these funds at the hands of the principal or superintendent, and most schoolmen make a practice of accounting, whether or not they are required to do so. For the most part, boards of education take the position that it is the principal's or superintendent's business, that the funds will be honestly accounted for, and that it is not a matter of requiring attention at the hands of the board.

In the main, this attitude is correct. In many cases, however, the various accounts of student organizations, such as class funds, receipts from entertainments, gate receipts from games, funds for the school paper, the annual, student clubs, and the various other things for which the school receives and expends monies, are all handled by boys or girls appointed as treasurers for these organizations. The degree to which the supervisor has knowledge of these accounts, or checks upon them, varies with the individual school

The salesman's remark set me thinking. Why should not a schoolman be also a business man? I am inclined to believe that most principals and superintendents are far better business men than they are given credit for. True, few of them handle large sums of money; but the principles involved in the handling of large sums are no different from those involved in the handling of smaller sums.

The methods and practices in handling the money received from student activities in this high school are probably little different from those of other schools, but I give them for what they are worth. Ours is a high school enrolling about 250 pupils. It has the usual number of student activities and organizations, requiring the receipt and expenditure of monies. It also has the usual student officials who handle these accounts, but not entirely independently.

The principal's office serves as a bank for all funds handled by the school and the school has a single checking account with a local bank. Class treasurers, or treasurers for student organizations, deposit all funds with the secretary in the principal's office, taking a receipt for the Each organization has a business meeting on the first Monday of the month, at which time bills are allowed and ordered paid. All checks for the payment of bills are drawn by the office secretary and signed by the principal. The student treasurer places his initials and O.K. on the check, and on the margin, the secretary makes a notation showing to what account the check is chargeable. At each business meeting the student treasurer gives a detailed report of receipts and expenditures and the office furnishes a statement of the organization's balance. The treasurer's report must check with the balance shown by the office.

It is a fundamental rule that no class or organization may incur any indebtedness for which it does not have sufficient money to make payment, unless the officers can show, without question, that the money will be available when the bill is due. For example, the business manager of the school annual must show signed subscriptions and signed orders for advertising, sufficient to cover all bills to be incurred, before he is allowed to place an order for engravings. Every class, every organization, is repeatedly cautioned, "You must not spend money that you do not have." Overdrafts are no more permissible with the office than they would be at a bank.

The only exceptions to this practice are made by the principal himself in cases where necessity or economy seems to demand. For example: In 1926 the athletic account carried forward a balance of \$1.20. Football, in this school, is not a financial success. The total receipts for the season of 1926 were \$239.50. However, we paid all bills, taking discounts whenever they were allowed, and having a total expenditure of \$418.41. The deficit of \$178.91 was, of course, drawn from other accounts, carrying a credit balance. The basketball season showed receipts of \$752.09 and expenses of only \$458.63, leaving sufficient credit to take care of all football deficit and still provide a credit balance of \$114.55 in the athletic account.

At the close of the school year the various classes showed credit balances as follows: Fresh-

man class, \$15.38; sophomore class, \$17.35; junior class, \$1.00; senior class, \$128.56. The sum of one dollar for the junior class is interesting. This class is responsible for the annual junior-senior dance, an activity requiring an expenditure of from \$50 to \$75. In addition the class lost the annual "junior-senior hunt"—a frolic resembling the game of hide-and-seek followed by a dinner to be paid for by the losing class. The junior class met both expenses even though a special collection from its members was necessary. As a junior put it, "we are nearly broke, but we don't owe everybody." The senior class used its balance for a class memorial.

What this school attempts to do is to account for and expend all monies in a businesslike manner without taking independence from the students. The single checking account gives us the opportunity at times, to save money and avoid inconveniences by using the funds of one account to take care of a temporary deficit in some other account. At the close of the school year there are no unpaid bills and no forgotten bills to cause dissatisfaction and require explanations when school opens in September. Local business men understand that the principal and not some student group is responsible for the payment of bills.

It may be argued that the principal is making himself responsible for matters which could be handled by the students themselves, and that, to some extent, such a practice deprives the student organization of independence. We feel that any loss of independence is more than balanced by the emphasis which is given to the principle of making expenditures fall within the limit of resources.

Shakespeare's Allusions to Teachers and Teaching

L. C. Breed

The student of Shakespeare cannot fail to be impressed by the dramatist's use of all the varied experiences of life for the purpose of clarifying the thoughts he wished to express or the lessons he desired to present through his various characters. The range of his knowledge and his familiarity with various professions has led to attempts to prove that he had been identified with one of them in early life, but the investigators have been unable to agree which profession it might have been.

It is known that lawyers are greatly impressed with the number and range of allusions to legal matters, and musicians find great familiarity on the part of Shakespeare with music and musical instruments. This line of thought can be continued, if need be, to say that James Russell Lowell covered the ground very comprehensively in stating that Shakespeare was an artist. Ben Jonsen affirmed that "he was not of an age, but for all time,"

The large number of Shakespeare's allusions to teachers and teaching show that he was interested in this professional activity and fully alive to its importance. Of these allusions only a few are here presented, but doubtless they are sufficient to show the truth of this statement.

Allusions to Teachers and Schools

"I hear you are a scholar—I will be brief with you."

"He is a better scholar than I thought he was."

"The epithets are sweetly varied like a scholar."

"Yea, and perhaps with more successful words than you, unless you were a scholar."

"This young scholar that hath been long studying at Rheims."

"I am no breeching scholar in the schools; I'll not be tied to hours."

"He was a scholar, and a ripe good one; exceeding wise, fair-spoken."

"Art hath thus decreed, to make some good, but others to exceed; and you are her laboured scholar."

"I doubt not but this populous city will yield many scholars."

"She was a vixen when she went to school."

"Creeping like a snail unwillingly to school."
"Like a school broke up, each hurries toward his home."

"Whom like a schoolboy you may overawe."

"A peevish schoolboy worthless of such honor."
"Never schooled and yet learned."

"I have some private schooling for you."

"The schoolmaster is exceeding fantastical."
"Schoolmasters will I keep within my house fit to instruct her."

"A schoolmaster well seen in music."

"Action and accent did they teach him there."
"I can easier teach twenty what were good to

"I can easier teach twenty what were good to be done than be one of the twenty to follow my own teaching."

"My royal cousin, teach you our princess English?"

"To teach a teacher ill beseemeth me."

"His training such that he may furnish and instruct great teachers."

"Teaching all that read to know the quintessence of every sprite."

"Be schoolmaster and undertake the teaching of the maid,"

"Stand by and mark the manner of his teaching."

"Courage and hope both teaching him the practice."

(Concluded on Page 114)



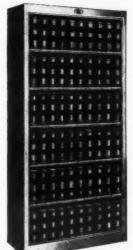
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36" 21" 78" Storage Cabinet
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to secure the combination which is due to the fact that the particular needs.

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| Teachers' Cabinet | Preferred Sizes | Height | 36" | 18" | 78" | 36" | 21" | 78" | Dimensions Are Overall |



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36" 18" 78"
21" 78"
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Dimensions Are Overall



Preferred Sizes
Depth
18" 78"
21"
Dimensions Are Overall



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My better built than Danabilt!"

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(Concluded from Page 112)

"He mastered there a double spirit of teaching and of learning."

"One who hath taught me more wit than ever I learned before in my life."

"An old religious uncle of mine taught me to speak."

"You taught me how to know the face of right."

"He must be taught, trained, and bid go forth."

"I thank thee who hath taught my frail mortality to know itself."

"O, 'tis a version in Horace; I know it well: I read it in the grammar long ago."

"Thy love did read by rote and could not

spell."
"I'll not be tied to hours nor pointed times

but learn my lessons as I please."
"Have lost, or do not learn for want of time,

the sciences."

"Will you hear the dialogue that the two learned men have compiled."

"The language I have learned these forty years; my native English, now I must forego." "The gentleman is learned and a most rare

speaker."
"Perhaps you learned it without book; but, I

pray, can you read anything you see?"
"I'll talk a word with this same learned

Theban. What is your study?"

"Come sit thou here, most learned justicer:

Thou sapient sir, sit here."
"Learned indeed were that astronomer that

knew the stars as I his characters."

"Ever witness for him those twins of learning that he raised in you, Ipswich and Oxford."

"O Lord, I could have stayed here all the night to hear good counsel. O, what learning is!"



THE TEACHER SICK-LEAVE QUESTION

The question of the manner of granting sick leave to teachers has been subjected to a careful study by Dr. James Frederick Rogers of the United Støtes Bureau of Education. Dr. Rogers contends that "in no detail of school administration is there such variety and such extremes of practice as in the matter of sick leave. On the one hand is a niggard-liness or negligence which makes no provision whatsoever beyond filling the teacher's place with a substitute whom the absent worker more than pays for out of her salary, and, on the other hand, leave allowed may be fairly unlimited without deductions from salary. There are leaves at full pay, leaves at two-thirds pay, one-half pay, and one-third pay; there are allowances at full pay for a certain number of days and half pay afterwards; there is full pay for 2 days, full pay for 3 days, 5 days, 10 days, 15 days, 20 days, 30 days, 60 days; there is full pay less \$1, less \$2, less \$2.50, less \$3. There are limitations and no limitations as to time, and there are cumulative plans.

There are limitations and no limitations as to start, and there are cumulative plans.

"Of 163 cities of more than 30,000 population, 'the investigator' continues, "about one half allow at least 10 days' leave annually at full pay, and two thirds allow at least 5 days. Nine of these cities grant 20 days or more at full pay. A comparison of these statistics with those of Engelhardt and Baxter, which include the practices of cities from 8,000 population up, indicate that very few of the cities under 30,000 allow 10 days' leave at full pay, and not many allow 5 days.

"It might be said in passing that the regulations in regard to sick leave in many school systems are so long and involved that they cover pages. If their purpose is to inhibit, by their formidable wording, the use of such leave, they are a great success. On the other hand, many schools are direct

in language and liberal in including in the leave granted at full-pay absence on account of serious illness or death in the family, quarantine, attendance at a wedding, etc.

"As for the principle involved in the various schemes of sick leave, doubtless it was figured roughly by their originators that the usual sickness will not last more than a certain number of days. It may also have occurred to the minds of some who were vigorous specimens of business executives that sickness ought not to last longer, and by setting a limit the sick teacher would not overstay her time. The addition of part pay after this period makes some allowance for those that would rather lose a few dollars than return to work

"The average number of days of absence of all teachers on account of sickness is only about three and a half days, and in no case which has come to our notice does the average exceed seven days. Not all teachers are ill every year and some are never sick, though few escape a more or less prolonged illness sooner or later. The average yearly absence of those who are ill is in the neighborhood of seven or eight days.

"It would seem that every school system would exercise proper judgment in protecting itself against loss by sick leave by (a) exercising a reasonable selection of material for its training schools, if it has them; (b) by furnishing practical schooling in hygiene during the years of training and with the understanding that good health will be considered in the selection for vacancies. In some training schools this latter regulation is in effect without previous selecting, or knowledge of this custom on the part of the pupil.

"The pupil should be accepted only on condition that such organic or functional defects as decayed teeth, serious defects of vision, painful feet, constipation, or other hampering conditions, about which there can be no question of harm, are removed by a given time.

"The teacher should be examined before employment by a physician responsible only to the school and be rejected or placed on probation for good physical reasons. The medical service of the school should be of the highest order and should exist for constructive purposes rather than for mere

(Concluded on Page 116)

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ELECTRICAL DESK

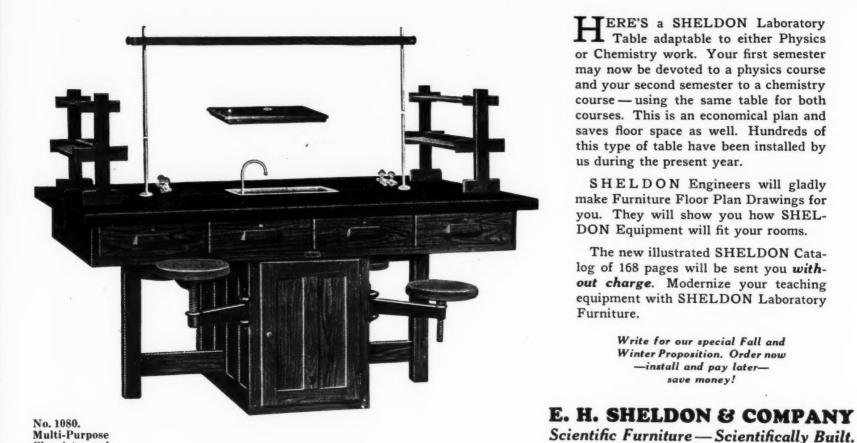
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Chemistry and Physics Table

(Concluded from Page 114) finding of physical faults. The teacher should be made to understand this and to desire rather than shun annual examinations or consultations. At the same time the teacher should be made to feel that she is under observation for glaring inconsistencies of conduct which may affect her health.

"A physician's certificate should be required in

all cases of illness of more than two days' duration; they should be reported to the medical officer, and the teacher should not be allowed to return to duty until in his opinion she is in condition for work."

TEACHERS AND ADMINISTRATION

—"Never was there a time in this country when there was so much oppression and suppression of teachers" said Mrs. Florence Curtis Hanson, secretary of the American Teachers' Federation, recently at a public gathering. "Attempts have been made to control the public and private lives of teachers. Skirts must be of ample length or discharge will follow. What time teachers shall go to bed; how many hours sleep they shall take, and how they shall employ their leisure time is set forth in the contracts given public-school teachers in a North In another town public-school Carolina city. teachers are required to teach also in Sunday school or give up their positions. Smoking by any teacher, man or woman, is prohibited now in Kansas City. Such a regulation would prevent Thomas Edison from teaching physics, if he wanted to; it would prevent Einstein from teaching science. I think it would prevent Paderewski from teaching music and Lorado Taft from teaching art."

—The school board of Lynn, Mass., recently dropped Mrs. Dorothy R. Perkins from the roll because she was a nonresident.

-The New Jersey State Board of Education has passed a rule providing that teachers taking the four-year training course at the Montclair Normal School must furnish a \$300 bond to be forfeited in event of their failure to teach three years in the schools of the state.

-The employment of substitutes to take the place of absent teachers in New York City is an expensive proposition. Recent figures of the board of education show that an average of \$8,059 will be paid out each school day during 1928 for substitute service. This amount is approximate and is subject to increase or decrease according to conditions uncontrollable by the school authorities. An epidemic of disease or sickness increases the substitute service demand as does the coincidence of religious holidays and school days

—Commissioner of Education John J. Tigert has issued a statement in which he terms the voluntary-contribution method of raising funds for the care of aged and disabled teachers a wornout practice, and suggests that it be replaced by comprehensive

pension systems.

One of the difficult problems which has arisen in the social development of the present generation, according to Mr. Tigert, is the proper provision for employees who have given the best years of their lives to service at small salaries, and because of age or disability are no longer able to continue the performance of their duties. The problem is presented in varied aspects to every industrial concern that employs a considerable number of persons.

Serious difficulties have been encountered in administering teachers' pension systems, and many of the early projects met disaster because they were based upon unsound theory. After thirty years of experience, the most glaring weaknesses have been eliminated, and even now no general agreement has been reached upon fundamental questions. In the direction of a better foundation, the U. S. Bureau of Education has procured the services of Prof. Fletcher Harper Swift, to make a study of the financial part of the pension program. Under his direction a complete treatise of the subject has been prepared which will prove a worthy contribu-tion to the literature on teachers' pensions.

HOW TO ATTEND A SCHOOL CONVENTION The Wisconsin Journal of Education recently pictured the slackers at educational conventions

A COURSE OF STUDY

In a certain sense the teacher must be the course of study. She must be the living, breathing personification of it, with an eye single to the wants and needs of the children. She must be able and have the power to cut and cull, to focus sharply what is vital in the course upon the apperceptive background of the children that they may have life and have it more abundantly. It is a trite but ringing truth that the child must be taught and not the course.-Principal Will D. Anderson, Mont Clare School, Chicago.

under the heading "What to do at a Convention."

It goes on and says: These helpful hints are the result of careful observation and statistical interpretation of the best practices. The results may be startling but they work beautifully.

1. If the meeting is announced to begin at 9:00 o'clock—leave the hotel at 9:05. The announce-ment is a playful imitation of good school practice. If you are careful you will reach the convention

2. Argue with the doorkeeper and finally you will effect an entrance. Saunter leisurely up the aisle until you find an unoccupied seat near the center. Crawl over six people who came on time. They have no rights anyway. Remain standing while you gaze around.

3. Ask your neighbor on the right for his program. He brought it especially for your use. Turn its pages leisurely and miss the particular pages you wanted. Put the program in your

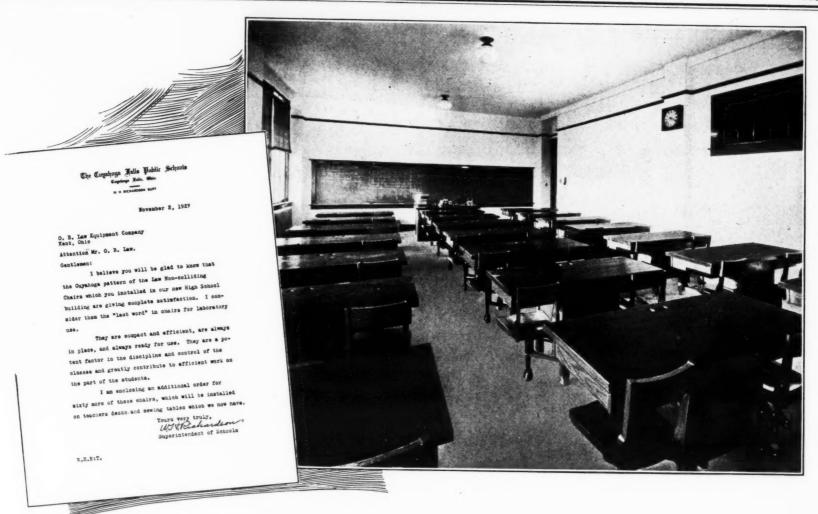
4. Turn to your neighbor on the left and in an amplified whisper say—"Who is this bird that's trying to speak?" Don't wait for his answer but remark casually that he seems extremely dull.

5. Listen five minutes, look around for five minutes, talk five minutes, and then get out your newspaper. Spread the paper in such a way as to shut off the view of the largest possible number. Since the speaker isn't a movie idol, it's just as well that the audience be spared.

6. You have now remained a half hour. That's too long. Make a hurried exit by crawling over the people at your right, if you came in from the left. In any event don't slight anyone. If possible time your exit so that you can leave just as the speaker nears the climax of his address. Maybe you can tone it down somewhat.

7. When you get to the hotel assume an attitude of complete boredom and tell everyone you see that the program was terrible. It shows your intellectual capacity.

Go to a show-it's better entertainment and requires no mental effort. The last time we were at a movie a dog in the aisle was enjoying the show as much as the rest of the audience. Probably he wouldn't have cared for the address either.



"A Potent Factor in Class Discipline"

JUST one of the many advantages offered through the use of THE LAW NON-COLLIDING CHAIR. This letter from Superintendent Richardson is, perhaps, the best indication of the merits of this new and decidedly unique type of school seating.

Yet there are many other points of merit that recommend THE LAW NON-COLLIDING CHAIR. Conservation of space which means increased pupil capacity! Non-colliding features which protect table edges and chair backs! An orderly condition in the classroom because the chairs are always in alignment and never out of place! These and many other points of interest are fully covered in a descriptive pamphlet available to school executives upon request.

THE LAW NON-COLLIDING CHAIR is adaptable for use on any table or desk which provides a minimum of twenty-two inches of knee space for the occupant of the chair. Its use is recommended particularly for your biology, bookkeeping, chemistry, domestic art, domestic science, general science, physics, and typewriting departments. There is a distinctive type of THE LAW NON-COLLIDING CHAIR for teachers' use.

Whether you are planning the purchase of new seating equipment or merely wish to check up on your present equipment for your own satisfaction, it will pay you to investigate the many advantages that are offered by THE LAW NON-COLLIDING CHAIR.

ANNOUNCEMENT

The B. L. Marble Chair Company of Bedford, Ohio, with a national reputation in the manufacture of chairs for school and business use, has acquired sole manufacturing and selling rights of THE LAW NON-COLLIDING CHAIR. Unequalled facilities for manufacturing, service, and distribution offered by The B. L. Marble organization will serve to further enhance the merchandising of this new and unusually efficient school chair.

The B. L. Marble Chair Company manufactures also a very complete line of tablet arm chairs, chapel chairs, teachers' chairs, stools, and straight leg chairs for all other uses in school seating. These chairs will have a particular appeal to school officials who are interested in seating equipment of the better quality and who are alive to the false economy in purchasing chairs of inferior grade.

THE LAW NON-COLLIDING CHAIR and B. L. MARBLE SCHOOL CHAIRS will be supplied by the leading school equipment, office equipment, and furniture dealers. Inquiries regarding definite agency agreements are invited from dealers in territories where we are not already represented as well as from those dealers who are now selling our regular line of business chairs. Descriptive pamphlet and full information will be sent promptly.

The B. L. Marble Chair Company



PAWTUCKET HIGH SCHOOL, Pawtucket, R. I.

R. C. N. Monahan,

Protect Your School from Acids

DURIRON drain pipe, universally resistant to all forms of corrosion, protects this school from the destructive leaking acids wasted from the chemical laboratories.

This is one of over 1200 school and college laboratories, new and old, permanently insured by acid-proof Duriron.

If in your school the chemical laboratory drain lines, traps, outlets, or fans are giving trouble, why not end *forever* this constant source of expense by replacing, during the Christmas recess, with Duriron?

Duriron will give unlimited service without maintenance expense, will safeguard walls, floors and finish, and will assure healthful conditions as long as the building stands.

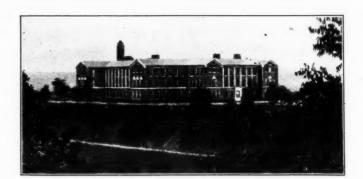
Duriron drain pipe is installed the same and interchangeably with cast iron soil pipe. Complete stocks maintained in New York, Dayton, Chicago, and San Francisco.

Duriron is produced only by

The DURIRON COMPANY
DAYTON ONLO

For Schools T-M-B Flooring

Offers Durability, Comfort and Economy



MARIETTA HIGH SCHOOL, MARIETTA, OHIO Garber & Woodward, Architects 65,000 Square Feet of T-M-B in Corridors and Classrooms

The smooth, velvety, rubbery surface of TMB gives hospitality to feet, but none to dirt or germs, for there are no seams or cracks.

Not only is the initial cost lower than other approved materials, but maintenance cost is exceptionally low, because TMB can be laid in different thicknesses in accordance with the actual condition of traffic. Furthermore any worn, damaged or altered area can be invisibly and locally repaired without replacement.

The serviceability and durability of TMB is well established by the record of School installations all over the country.

New bright, attractive colors have recently been worked out. TMB is now available in walnut, olive green, mahogany, tan, black, verde green, chocolate, and light olive green.

Every installation is made by our own trained mechanics under the supervision of competent engineers.

The Moulding record of sixty-two years of responsibility gives full significance to our absolute guarantee that TMB will give the service we claim for it.

We invite inquiries on any flooring problem. Our fund of information is cheerfully available to you with no obligation.

THOS. MOULDING BRICK CO.

151-169 W. Wacker Drive Chicago, Ill. Grand Central Terminal Bldg. New York, N. Y.



Peterson Furniture for Laboratory and Library



OVER THIRTY-FIVE YEARS SPENT IN DEVELOPMENT AND PAINSTAKING ASSEM-BLAGE OF QUALITY MATERI-ALS HAS GIVEN PETERSON EQUIPMENT AN ENVIABLE REPUTATION.

> You have definite assurance that your school requirements will be well served for years to come.



Student's Biology Table. A double-duty laboratory and recitation table, where it is preferable to have students face one way.

Children's Magazine Rack. Designed especially for the Children's Department of the library. It is made with five compartments of various sizes.

PETERSON SERVICE

A rough sketch of the rooms you wish to equip will promptly bring our suggestion together with an estimate—this without obligation on your part.



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1222-34 FULLERTON AVENUE

Minimum

\$1,000

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Distributors conveniently located to serve you

CHICAGO, ILLINOIS

Student's Chemical and Agricul-tural Table. A dual-purpose lab-oratory table. Ample storage space for sixteen students. Open spaces below provide knee space for students when using stools.

BRIDGEPORT SALARY SCHEDULE The board of education of Bridgeport, Conn., re-cently adopted the new salary schedule which was recommended by Superintendent Carroll R. Reed about a year ago. The provisions of this schedule apply to all grades in the schools without regard to sex. In other words, it is a single schedule. By a single schedule is meant a schedule under which teachers with equivalent training and experience are paid the same salaries, whether they teach in the high school, junior high school, or elementary school mentary school.

General Regulations
I. First Appointment. The first appointment of any person to any position shall depend solely upon his comparative fitness to serve the schools. The

5 High school plus three years.....

Normal-school graduates (high school plus two

High school plus four years (for teachers with

four years of professional training, not organ-

ized so as to obtain a degree from a standard college or university).....

Bachelor's degree from standard college or uni-

Bachelor's degree plus one year of graduate

1 Master's degree.....

Preparation

principal of the normal school. No candidate without two years of successful experience will be

considered for a high-school position.

II. Probationary Period. All teachers entering the system shall do so on a two-year probationary period. Annual increases may or may not be allowed during the second year of this period and teaching service must be satisfactory for retention

beyond the probationary period.

III. Certificates. All teachers must hold certificates according to state requirements. No further town or local certificates will be granted. IV. The maximum allowance for experience out-

side of Bridgeport for all positions will be six years. Fixed Salary. The salary of each teacher shall be fixed in terms of the schedule at the time of appointment each year. No person's salary shall be changed during the period of the contract on account of extra credits earned.

VI. This schedule supersedes all former rules relating to qualifications and certification of teachers and salary schedules.

Maximum

\$2,100

2,300

2,500

2,600

2,900

3,100

Yearly

Increases

 11×100

maximum

above \$2,300

above \$2,600

maximum

maximum 2×100 above \$2,900

maximum

12 x 100 3 x 100

 2×100 above \$2,100

 2×100

Professional Training of Teachers

Elementary Schools. The minimum professional training required for appointment to a position in the elementary schools is graduation from a standard two-year normal-school course (two years above the high school) or its equivalent. Teachers who are graduates of two-year normalschool courses including 16 semester hours of pro-fessional training, in completing the remaining years required for a bachelor's degree will be expected to obtain their degrees in courses that will better prepare them for the work which they are doing or are planning to do in the schools, such courses to have the approval of the superintendent of schools.

II. Junior High Schools. The minimum professional training required for appointment to a posi-tion in the junior high school is graduation from a two-year normal-school course plus one year of extra training of which 90 recitation hours shall be in the subject to be taught.

III. Senior High Schools. The minimum professional training required for appointment to a position in the senior high schools is graduation from an approved college, normal school or uni-versity conferring a bachelor's degree which repre-sents four years of collegiate training including 16 semester hours of professional training in educa-

IV. A Master's Degree will be recognized for salary increase under the following conditions:

a). In the elementary school, kindergarten through grade six, a master's degree must represent either a major in education and a minor involving a study of the problems of the elementary school, or the reverse.

b) In the secondary schools, grades 7 to 12, a master's degree must represent either a major in the special field to be taught and a minor in education or the reverse.

Definitions

I. A year of training shall be interpreted to mean 480 recitation hours of approved work or one year's credit in a degree-granting institution of college rank.

Four years of college work will be accepted only when 16 semester hours or 240 recitation hours of professional training in education are included.

date of filing application, place of residence or the rsonal needs or interests shall not be considered as qualifications for or as claims upon appointment, except that graduates of the Bridge-port Normal School shall be appointed before all other candidates to vacant positions in the first six grades of the elementary schools in the order of their rank as certified to the superintendent by the

Safeguard The board of education reserves the right at any time to issue regulations determining the amount of academic work that persons in the teaching and supervisory service may file within any one year, if in its judgment such regulations are necessary to safeguard the health of the teacher or the efficiency of the work.



Use Only The Safe Dayton for hanging Christmas decorations!

MAJORITY of the thousands of yearly ladder accidents take their toll at Christmas time, when school trees and schoolroom walls are hung with Yuletide decorations.

The Dayton Safety Ladder precludes the risk of such an accident in your school, and we are prepared through our distributors to fill your ladder needs at once.

Dayton Safety Ladders cannot tip, slip, slide, sway, wobble or collapse. Wide leg spread surmounts all desks and other obstacles - on the broad

platform with its high guard rails, two persons can work as quickly and securely as on solid ground.

Made of steel-braced aeroplane spruce, in sizes 3 to 16 feet, Daytons fold conveniently for easy carrying or storage. They are moderate in price. Today,

while the matter is before you, equip your school with the Dayton for



The broad working platform and safety rails of The Dayton prevent falls -make all work safe.

Safety Ladder

The Dayton Safety Ladder Co.

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121-123 WEST THIRD STREET CINCINNATI, OHIO

Supervising Principals in Elementary Schools Minimum "A" "B" "D" Less than 10 Rooms 2350 2550 2750 2950 10-19 Rooms 2600 2800 3000 3200 30 Rooms and Over . 3100 20-29 Rooms 2850 3050 Increases—3 x Maximum 1929 . 3700 3900

Special Positions
Teachers of Exceptional and Crippled Classes. Such teachers shall receive \$200 beyond the regular teachers' schedule.

II. City Normal-School Instructors and Critics. Such teachers shall receive \$200 beyond the regular teachers' schedule. The minimum qualifications for appointment to position of instructor in the City Normal School shall be a bachelor's degree and five years' experience. The minimum requirement for appointment to a critic's position in the normal school shall be three years' training beyond high school plus five years' experience.

Heads of depart-Heads of Departments.

ments in senior high school shall receive \$200 in excess of the regular teachers' schedule.

IV. Teaching Principals. Teaching principals shall receive \$200 beyond the regular teachers' schedule.

THE OAKWOOD SALARY SCHEDULE The board of education at Oakwood, in Montgomery county, Ohio, in working out an adequate salary schedule, has adopted a policy that teachers shall be paid salaries sufficient to guarantee against financial worries, and at the same time, to allow teachers to advance culturally, to take care of dependents, and to practice thrift. The schedule recognizes equal pay for equal work, and allows higher salaries for men teachers who must maintain a

home and take care of dependents. Under the schedule, low minimum salaries are provided in each group, with a number of increases for efficiency over a long period of promotion. The schedule provides for the following minimum and maximum salaries:

A minimum of \$1,100 and a maximum of \$2,200 for teachers with two years of training beyond the high school.

A minimum of \$1,250 and a maximum of \$2,600 for teachers with three years of training beyond the high school.

A minimum of \$1,400 and a maximum of \$3,000 for teachers with college degrees. A supermaximum of \$4,000 will be paid for further graduate study and unusual proficiency over a longer period of

The schedule provides for yearly increases of \$100 for teachers with less than a college degree; \$150 for single teachers with college degrees; and \$200 for married men with college degrees.

The Oakwood schools employ 48 teachers during the school year 1927-28.

THE NEW SALARY SCHEDULE IN NEW YORK CITY

President George J. Ryan of the New York City Board of Education recently submitted to the board of estimate a schedule of salary increases for school teachers for which the board of estimate had waited before releasing the \$14,000,000 designated for that The recommendations of education follow generally those made by the joint committee appointed by the mayor and the president of the board. It is expected that the schedules will become effective on January 1.

For senior teachers, the board's rates are somewhat higher than the committee's. The salaries for teachers of 1A to 6B classes assigned as senior teachers are:

First year, present rates, \$1,600; new rates, \$1.758.

Second year, present rates, \$1,725; new rates,

Third year, present rates, \$1,850; new rates, Fourth year, present rates, \$1,975; new rates, Fifth year, present rates, \$2,100; new rates,

Sixth year, present rates, \$2,225; new rates, Seventh year, present rates, \$2,350; new rates,

\$2,550. Eighth year, present rates, \$2,475; new rates,

Ninth year, present rates, \$2,600; new rates, \$2.814. Tenth year, present rates, \$2,725; new rates,

Eleventh year, present rates, \$2,850; new rates, \$3,114

Twelfth year, present rates, \$2,975; new rates, \$3.294 Thirteenth year, present rates,; new rates,

\$3,474. Fourteenth year, present rates,; new rates,

Salaries of 7A and higher classes assigned as senior teachers are as follows: First year, present rates, \$2,000; new rates,

Second year, present rates, \$2,150; new rates, \$2,346.

Third year, present rates, \$2,300; new rates,

Fourth year, present rates, \$2,470; new rates, \$2,658 Fifth year, present rates, \$2,600; new rates,

Sixth year, present rates, \$2,750; new rates, \$2,970.

Seventh year, present rates, \$2,900; new rates, \$3,126

Eighth year, present rates, \$3,050; new rates, \$3,282 Ninth year, present rates, \$3,200; new rates,

Tenth year, present rates, \$3,360; new rates,

\$3.594. Eleventh year, present rates,; new rates,

Twelfth year, present rates,; new rates,

\$4,050.

Thirteenth year, present rates,; new rates, Kindergartners and teachers of 1A to 6B classes

will be paid as follows: First year, present rates, \$1,500; new rates, \$1,608.

(Continued on Page 122)



For Better Care of Blackboards

STRANGELY enough, there seems to be a current belief abroad in our schools that blackboards need no particular care or upkeep. That damaging error has proven a costly one to school boards everywhere.

Prevent unnecessary repair and replacement expense by giving your blackboards a little care. You can accomplish it in two ways:-

1. Keep Surface Clean. Mr. Charles Daniel, from his broad and practical experience, says: "I find that about twenty-five parts of Denatured Alcohol and seventy-five parts water, cuts grease or sleekiness from the board with the least effort. A good sized sponge or woolen cloth soaked in the mixture and wrung out just enough so it will not run, should be used.

"Go over the board starting at the top. Wipe from left to right and back again over same surface. Go through same operation just below the first wiping. Do not rub too hard or not over two or three times at same surface on any one cleaning. On slate boards it would not matter but on composition boards it would affect the composition. Do not wipe dry. Let dry by evaporation."

2. Use Good Chalk. The first quality "Old Faithful" Blackboard Chalks, pioneers (1835) and still the leaders, are all chalk - no grit, clay or grease to mar slate or composition surfaces. Compare their markings with any other chalks - we will let you be the judge.

Write for chalk booklet or general catalog.

"Old Faithful" Colored Chalk

MAKES VIVID XMAS DESIGNS

for spreading the Holiday spirit in classrooms. Teacher will like them better because their colors are bright and fresh, their markings clear and definite and any necessary erasures are clean and easily made. Write for samples.

THE AMERICAN

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LEADERSHIP SINCE 1835
92 Years of Faithful Service

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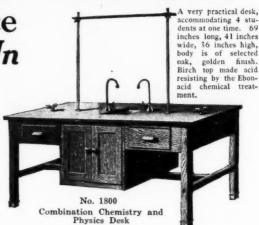


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Measured by any conceivable laboratory test, Wiese equipment is first outstanding in performance. Rigid classroom requirements serve only to accentuate the perfection that is typical of Weise equipment. Built into every product is a quality that reflects the skill of its craftsmen, the specialized experience of its entire organization.

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ENGINEERS AND BUILDERS

Standard or Built-to-order Educational and Technical Furniture for Physics, Agriculture, Biology, Household Economics and Manual Training.

FACTORY: MANITOWOC, WISCONSIN. SALES OFFICES IN PRINCIPAL CITIES.



(Continued from Page 120)

Second year, present rates, \$1,625; new rates, Third year, present rates, \$1,750; new rates,

\$1,872 Fourth year, present rates, \$1,875; new rates,

Fifth year, present rates, \$2,000; new \$2,136. Sixth year, present rates, \$2,125; new rates,

\$2,268. Seventh year, present rates, \$2,250; new rates,

\$2,400. Eighth year, present rates, \$2,375; new rates,

Ninth year, present rates, \$2,500; new rates, \$2,664. Tenth year, present rates, \$2,625; new rates,

Eleventh year, present rates, 2,750; new rates,

Twelfth year, present rates, \$2,875; new rates,

Thirteenth year, present rates,; new rates, \$3,324. Fourteenth year, present rates,; new rates,

Junior-high-school teachers whom the mayor's committee would have paid \$4,092 as a supermaximum, will receive \$4,200 as top pay. The schedule

is as follows: First year, present rates, \$1,900; new rates, \$2,040. Second year, present rates, \$2,050; new rates,

\$2,196. Third year, present rates, \$2,200; new rates,

Fourth year, present rates, \$2,350; new rates,

\$2,508. Fifth year, present rates, \$2,500; new

Sixth year, present rates, \$2,650; new rates, \$2,820.

Seventh year, present rates, \$2,800; new rates, \$2,976.

Eighth year, present rates, \$2,950; new rates, Ninth year, present rates, \$3,100; new rates,

\$3,288. Tenth year, present rates, \$3,250; new rates, \$3,444.

Eleventh year, present rates,; new rates, \$3,600

Twelfth year, present rates,; new rates; \$3,900.

Thirteenth year, present rates,; new rates, \$4,200. Teachers in the seventh and eighth grades, who

also would have been paid \$4,092 as the supermaximum, will receive \$3,900, unless assigned as senior teachers, when they will receive \$4,350. The schedule is as follows:

First year, present rates, \$1,900; new rates, \$2,040.

Second year, present rates, \$2,050; new rates, \$2,196. Third year, present rates, \$2,200; new rates,

\$2,352. Fourth year, present rates, \$2,350; new rates, \$2,508

Fifth year, present rates, \$2,500; new rates, \$2,664. Sixth year, present rates, \$2,650; new rates,

\$2,820. Seventh year, present rates, \$2,800; new rates, \$2,976.

Eighth year, present rates, \$2,950; new rates, \$3,132 Ninth year, present rates, \$3,100; new rates,

\$3,288. Tenth year, present rates, \$3,250; new rates, \$3,444.

Eleventh year, present rates,; new rates, \$3,600. Twelfth year, present rates,; new rates,

\$3,900. Teachers in the ID group assigned as teacherclerks will be paid as follows:

First year, present rates, \$1,200; new rates, \$1,200.

Second year, present rates, \$1,300; new rates, \$1,300. Third year, present rates, \$1,400; new rates,

Fourth year, present rates, \$1,500; new rates, \$1,500.

Fifth year, present rates, \$1,600; new rates, Sixth year, present rates, \$1,700; new rates,

Seventh year, present rates, \$1,800; new rates, \$1,800.

Eighth year, present rates, \$1,900; new rates, \$1,900

Ninth year, present rates,; new rates. \$2,000. Tenth year, present rates, new rates.

\$2,100. Eleventh year, present rates,; new rates,

\$2,200 Teacher-clerks assigned to parental schools will be paid as follows: First year, present rates,

\$1,560; \$1,560. Second year, present rates, \$1,690; new rates,

Third year, present rates, \$1,820; new \$1,820. Fourth year, present rates, \$1,950; new rates,

\$1,950 Fifth year, present rates, \$2,080; new \$2,080.

Sixth year, present rates, \$2,210; new rates. \$2,210. Seventh year, present rates, \$2,340; new rates, \$2,340.

Eighth year, present rates, new rates, Ninth

\$2,600. Tenth year, present rates,; new rates, \$2,730.

Visiting teachers will be paid as follows: First year, present rates, \$1,900; rates, new

\$2,040. Second year, present rates, \$2,050; new rates, \$2,196.

Third year, present rates, \$2,200; new rates, Fourth year, present rates, \$2,350; new rates,

\$2,508. Fifth year, present rates, \$2,500; new rates,

\$2,664. Sixth year, present rates, \$2,650; new rates, \$2,820.

Seventh year, present rates, \$2,800; new rates, \$2,976.

Eighth year, present rates, \$2,950; new rates,

Ninth year, present rates, \$3,100; new rates, \$3,288. Tenth year, present rates, \$3,250; new rates, \$3,444.

(Continued on Page 124)

101 YEARS OF MANUFACTURING EXPERIENCE



The H-W line of School Seats is most complete and contains many desirable models.

This is the H-W Eclipse Adjustable Desk Set, a strong and easily adjusted unit built for service.

A SIMPLE, YET POSITIVE ADJUSTMENT!

HERE is a strong, rigid school desk with a wide range adjustment that is simple, yet positive. The wedge-chair adjustment and the vise-clamp adjustment for the desk cannot possibly loosen or work down. If you are looking for a strong, easily adjusted desk with nothing to break, get out of order, or cause you trouble, this Heywood-Wakefield Eclipse Adjustable desk set will fill your requirements.

More than 10,000 sets of this type are in use in the Panama Canal Zone and over 50,000 in the city of Boston alone. Surely such tremendous and continued orders amply prove that this Heywood-Wakefield desk is built to serve long and satisfactorily. May we tell you more about it?

> The advantages of this desk and many other school units are described in our new School Furniture Catalogue. Write for a copy.





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Are You Proud of Your Blackboards?

THE next time you make a tour of the classrooms, pay particular attention to the blackboards; and watch the pupils when board work is in progress.

The use of poor chalks on unwashed boards makes the children squint. It does not pay to economize with poor chalks. Your blackboards are often ruined with scratches, but, more important, children's eyes are in danger.

Good, clear blackboard work is a distinct help in sight conservation. It presents an appearance of orderly arrangement that makes the classroom attractive to visitors and conducive to student industry.

By all means use good chalks. On your next order specify Binney & Smith Co.'s White and Colored Chalk Crayons. You will be proud of your blackboards. Your teachers' tasks will be lightened. Your pupils' eyes will be protected.

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Gold Medal Products

CRAYOLA Wax Crayon
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ANTI-DUST 95% pure Chalk Crayon
AN-DU-SEPTIC Dustless Crayon
ATLANTIC White Chalk Crayon
White and Colored Blackboard Chalk
Lecturers' Colored Chalk

(Continued from Page 122)	
Eleventh year, present rates,; nev	v rates,
\$3,600.	
Twelfth year, present rates,; new	rates,
\$3,900.	
Thirteenth year, present rates,; nev	v rates,
\$4,200.	
Teachers in charge of school thrift will be	paid as
follows:	
First year, present rates, \$3,625; new	rates,
\$3,500.	
Second year, present rates,; new	rates,
\$3,700.	
Third year, present rates,; new	rates,
\$3,900.	
Fourth year, present rates,; nev	v rates,
\$4,100.	
Fifth year, present rates,; new	rates,
\$4,300.	
Sixth year, present rates,; new	rates,
\$4,500.	
Teachers in charge of truant and prob	
schools (assistants to principals in charge	of inde-
pendent schools) will be paid as follows:	

First year, present rates, \$3,700; new rates, \$3,900. Second year, present rates, \$3,800; new rates,

Third year, present rates; \$3,900; new rates, \$4,308.

Fourth year, present rates,; new rates, \$4,512.

Fifth year, present rates,; new rates, \$4,716. Sixth year, present rates,; new rates, \$4,920. Teachers in the 1J group assigned as assistants to principals will be paid as follows:

First year, present rates, \$3,400; new rates, \$3,600.
Second year, present rates, \$3,500; new rates,

Third year, present rates, \$3,600; new rates, \$4,008.
Fourth year, present rates, ...; new rates,

\$4,212. Fifth year, present rates, ...; new rates, \$4,416. Sixth year, present rates, ...; new rates, \$4,416.

Sixth year, present rates,; new rates, \$4,620. Teachers in the IIA group assigned as assistant teachers in day high schools will be paid as follows: First year, present rates, \$1,900; new rates,

Second year, present rates, \$2,050; new rates, \$2,304.

Third year, present rates, \$2,200; new rates, \$2,460.
Fourth year, present rates, \$2,350; new rates, \$2,616.
Fifth year, present rates, \$2,500; new rates, \$2.772.
Sixth year, present rates, \$2,650; new rates, \$2.940.
Seventh year, present rates, \$2,800; new rates,

\$3,108.
Eighth year, present rates, \$2,950; new rates, \$3,276.
Ninth year, present rates, \$3,100; new rates,

*3,444.

Tenth year, present rates, \$3,250; new rates, \$3,624.

Eleventh year, present rates, \$3,400; new rates, \$3,804.

Twelfth year, present rates, \$3,550; new rates, \$3,993.

Thirteenth year, present rates, \$3,700; new rates, \$4,188.
Fourteenth year, present rates,; new rates,

\$4,004.

Fifteenth year, present rates, ...; new rates, \$4,656.

Teachers in IIA group assigned as assistant

Teachers in IIA group assigned as assistant teachers of agriculture will be paid as follows: First year, present rates, \$1,900; new rates, \$2,362.

Second year, present rates, \$2,050; new rates, \$2,534.

Third year, present rates, \$2,200; new rates, \$2,706.

Fourth year, present rates, \$2,350; new rates, \$2,877.

Fifth year, present rates, \$2,500; new rates, \$3,049.

Sixth year, present rates, \$2,650; new rates, \$3,234.

Seventh year, present rates, \$2,800; new rates, \$3,506.

Eighth year, present rates, \$2,950; new rates, \$3,603.

Ninth year, present rates, \$3,100; new rates,

\$3,788.
Tenth year, present rates, \$3,250; new rates, \$3,986.
Eleventh year, present rates, \$3,400; new rates,

\$4,184.

Twelfth year, present rates, \$3,550; new rates, \$4,395.

Thirteenth year, present rates, \$3,700; new rates, \$4,606.

Fourteenth year, present rates,; new rates, \$4,844.

Fifteenth year, present rates,; new rates, \$5,121.

Teachers in II-A-1 group assigned as administrative assistants in day high schools will be paid as follows:

follows:
First year, present rates, \$2,405; new rates, \$4,308.
Second year, present rates, \$2,600; new rates,

\$4,584.

Third year, present rates, \$2,680; new rates, \$4,860.

Fourth year, present rates, \$2,760; new rates, \$5,136.
Fifth year, present rates, \$2,940; new rates,

\$5.412.
Sixth year, present rates, \$3,120; new rates, \$5.688.
Seventh year, present rates, \$3,300; new rates,

Eighth year, present rates, \$3,300; new rates,

Ninth year, present rates, \$3,660; new rates, Tenth year, present rates, \$3,840; new rates,

Eleventh year, present rates, \$4,020; new rates,

Twelfth year, present rates, \$4,200; new rates,
Thirteenth year, present rates, \$4,380; new rates,

Teachers in II-b group assigned as first assistants in day high schools will be paid as follows:
First year, present rates, \$3,200; new rates,

\$4,308. Second year, present rates, \$3,400; new rates, \$4,584.

Third year, present rates, \$3,600; new rates, \$4,860.
Fourth year, present rates, \$3,800; new rates,

\$5,136.

Fifth year, present rates, \$4,000; new rates, \$5,412.

Sixth year, present rates, \$4,200; new rates, \$5,688. Clerical, library, and placement assistants in day high schools will be paid as follows:

(Continued on Page 127)

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singularly appropriate to Christmas projects

Old familiar Noëls are pealed out clearly by bells, and recorded faithfully on Victor Orthophonic Records.

There are bells in joyous chime, the wild sweet tunes from famed belfries and towers . . . Victor Orthophonic Records of bells and bell-Noëls should form a rich part of the Christmas project, a vital part of the Christmas program, of teachers under your supervision.

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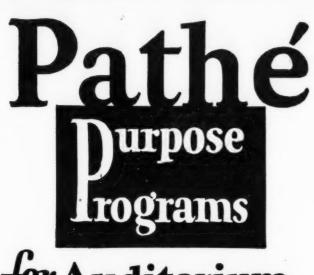
Hertz and San Francisco Sympony Orchestra To a Wild Rose; To a Water Lily (MacDowell) For still listening. Chicago Symphony Orchestra Witches' Dance; Nautilus; To the Sea (Mac-Dowell) Hans Barth 20396 Will o' the Wisp; To a Humming Bird; Of Br'er Rabbit; From Uncle Remus (MacDowell) Piano Studies by Myrtle C. Eaver . . . Symphony in G Minor (Mozart) The full beautiful album. The Royal Opera Orchestra 9116-9118 inc. Fire Music (from "The Valkyrie" by Wagner)— Violence and splendor. Albert Coates Symphony Rienzi Overture - Philadelphia Symphony Or-

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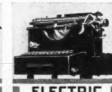
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First year, present rates, \$1,500; new rates, \$1,500.

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Third year, present rates, \$1,700; new rates, \$1,800. Fourth year, present rates, \$1,800; new rates,

\$1,950. Fifth year, present rates, \$1,900; new rates, \$2,100.

Sixth year, present rates, \$2,000; new rates, \$2,250.

Seventh year, present rates, \$2,100; new rates, \$2,400. Eighth year, present rates, \$2,200; new rates,

\$2,550. Ninth year, present rates, \$2,300; new rates,

\$2,700. Tenth year, present rates, \$2,400; new rates,

Eleventh year, present rates, \$2,500; new rates, Twelfth year, present rates, \$2,600; new rates,

Thirteenth year, present rates, \$2,700; new rates,

Principals in elementary schools having 25 to 48 classes, and practice schools having 18 to 48 classes will be paid as follows:

First year, present rates, \$3,750; new rates, \$5,000.

Second year, present rates, \$4,000; new rates, \$5,250.

Third year, present rates, \$4,250; new rates, \$5,500. Fourth year, present rates, \$4,500; new rates,

\$5,750. Fifth year, present rates, \$4,750; new rates,

Principals in junior high schools or schools with junior high-school departments (and schools for the deaf, crippled, and probationary schools) having 25 to 48 classes will be paid as follows:

First year, present rates, \$3,950; new rates, Second year, present rates, \$4,200; new rates,

Third year, present rates, \$4,450; new rates,

Fourth year, present rates, \$4,700; new rates, \$6,250

Fifth year, present rates, \$4,950; new rates, \$6,500.

Principals in elementary schools having 49 to 84 classes will be as follows

First year, present rates, \$4,000; new rates, \$5,500. Second year, present rates, \$4,250; new rates,

\$5,750. Third year, present rates, \$4,500; new rates,

Fourth year, present rates, \$4,750; new rates,

\$6,250. Fifth year, present rates, \$5,000; new rates,

Principals of junior high schools or schools with junior high-school departments having 49 to 84 classes:

First year, present rates, \$4,200; new rates, \$6,000. Second year, present rates, \$4,450; new rates,

\$6,250. Third year, present rates, \$4,700; new rates, \$6,500.

Fourth year, present rates, \$4,950; new rates, \$6,750 Fifth year, present rates, \$5,200; new rates,

Principals of elementary schools having 85 or

more classes will be paid as follows: First year, present rates, \$4,250; new

Second year, present rates, \$4,500; new rates, \$6,250.

Third year, present rates, \$4,750; new rates, Fourth year, present rates, \$5,000; new rates,

\$6,750. Fifth year, present rates, \$5,250; new rates,

Principals of junior high schools or schools with junior high-school departments having 85 or more classes (and schools for the deaf, crippled, and proschools) will be naid as follows

First year, present rates, \$4,450; new rates,

Second year, present rates, \$4,700; new rates, \$6,750.

Third year, present rates, \$4,950; new rates,

Fourth year, present rates, \$5,200; new rates, \$7.250.

Fifth year, present rates, \$5,450; new rates,

Principals of compulsory continuation schools having 25 to 48 classes:

First year, present rates, ; new rates, \$6,000. Second year, present rates,; new rates, \$6.250.

Third year, present rates,; new rates, \$6,500. Fourth year, present rates,; new rates,

Fifth year, present rates,; new rates, \$7,000. Principals of compulsory continuation schools having 49 to 64 classes will be paid as follows:

First year, present rates,; new rates, \$6,500. Second year, present rates,; new rates, \$6,750.

Third year, present rates,; new rates, 7,000. Fourth year, present rates,; new rates, \$7,250.

Fifth year, present rates,; new rates, \$7,500. Principals of compulsory continuation schools having 85 or more classes will be paid as follows: First year, present rates, ...; new rates, \$8,000. Second year, present rates, ...; new rates,

\$8,250. Third year, present rates,; new rates, \$8,500. Fourth year, present rates,; new rates,

Fifth year, present rates,; new rates, \$9.000. Principals of parental schools will be paid as follows:

First year, present rates, \$3,750; new rates, \$5,500. Second year, present rates, \$4,000; new rates,

\$5,750. Third year, present rates, \$4,250; new rates,

\$6,000. Fourth year, present rates, \$4,500; new rates,

Fifth year, present rates, \$4,750; new rates,

Principals of day high schools having 50 or more

First year, present rates, \$5,500; new rates, \$8,000. Second year, present rates, \$6,000; new rates,

Third year, present rates, \$6,500; new rates, \$9,000.



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Fourth year, present rates,; new rates, Fifth year, present rates,; new rates,

SALT LAKE CITY

\$10,000. Principals of training schools for teachers hav-

ing more than 50 or more teaching positions: First year, present rates, \$5,500; new rates, \$8,000.

Second year, present rates, \$6,000; new rates, \$8,500.

Third year, present rates, \$6,500; new rates, \$9,000.

Fourth year, present rates,; new rates, \$9,500. Fifth year, present rates,; new rates,

\$10,000. Principals of day high schools and training schools for teachers having fewer than 25 present, or 50 proposed teaching positions will be paid as follows:

Present rate, \$6,000; new rate, \$7,500. The salaries for officials in the administrative

department will be as follows:	Present	New
	Rate	Rate
Superintendent	\$20,000	\$25,000
Superintendent-emeritus		12,000
Associate superintendent		12,500
Member board of examiners		11,000
District superintendent	6,600	10,000
District superintendent assigned		
as assistant to superintendent		11,250
Director of attendance		12,500
Assistant director of attendance		10,000
Director of reference, research, and		
statistics	0 000	10,000
The assistant director of referen	ice, resea	rch, and

statistics will be paid as follows: First year, present rates, \$5,500; new rates,

\$6,000. Second year, present rates,; new rates, \$6.250.

Third year, present rates,; new rates, \$6,500. Fourth year, present rates,; new rates,

Fifth year, present rates,; new rates, \$7,000. Attendance officers will be paid as follows: First year, present rates, \$1,560; new rates,

\$1,800. Second year, present rates, \$1,690; new rates, \$2,000.

Third year, present rates, \$1,820; new rates, \$2.200.

-The school board of Wallingford, Conn., has adopted salary schedules for grade and high-school teachers. Under the schedule for elementary teachers, teachers in the kindergarten and primary grades will be given a minimum of \$1,000 and a maximum of \$1,500, and a supermaximum of \$1,700 for extra work. Teachers in grades six, seven, and eight will receive a minimum of \$1,100 and a maximum of \$1,600, and a supermaximum of \$1,800. Annual increments of \$100 will be paid for four years, followed by increments of \$50 for two years. Assistants to principals will receive \$100 above the schedule, and teaching principals will receive \$200 above the schedule.

Under the schedule for high-school teachers, women teachers with academic training will be given a minimum of \$1,300 and a maximum of \$2,000. Women teachers with nonacademic training will be given a minimum of \$1,200 and a maximum of \$1,800. A supermaximum of \$2,200 for academic teachers and \$2,000 for nonacademic teachers is provided. Annual increments of \$100 for six years, followed by increments of \$50 for two years will be allowed.

In computing salaries under the schedule, it is provided that teachers who have reached the present maximum, based on experience, shall be paid increases of 40 per cent annually for two years, plus any earned increments for professional study. No increase may exceed \$100, plus increments earned through professional study.

-The Public Education Association of New York City has advocated the retention in general of the salary increases proposed for higher positions in the public-school system of the city. The association, in a statement setting forth its views on the salary problem, questioned seriously whether it would be reasonable or fair to listen to the plea of those who sought to provide for the teachers by scaling down the salaries proposed for the higher positions. Advocates of the reduction in rates for the higher supervisory and administrative posts point out that while elementary teachers will receive only a 9-per-cent increase over present rates, some of the higher officers will receive over 50 per cent.

VISUAL EDUCATION BY MEANS OF FIELDWORK

The school excursion, or field trip, has been emphasized as a major visual aid to education by the director of visual education of the Pennsylvania state education department in a statement issued by the U.S. Bureau of Education on October 15.

Pennsylvania's plan for visual education is based on the need of visual services for instruction and the necessity of teachers knowing when and how to use them intelligently. The plan aims to focus the attention of the state's teachers on the mean-ing and significance of visual education; on the psychology underlying visual instruction; on the philosophy behind the department of public instruction's plan; and on the different types of visual aids and their effective use in the classroom.

In order to simplify an evaluation and study of the different types of visual materials, they have assembled as follows: (1) Apparatus and equip-ment; (2) school journey; (3) object, specimen, model; (4) pictorial materials; (5) miscellaneous gids

Of all the types of visual aids, the school journey is considered one of the most important and valis considered one of the most important and valuable. The school journey, field trip, or school excursion, brings the children into direct contact with objects of knowledge and gives opportunity for initial concepts. The school journey is regarded as a major visual aid because it effects an economy in time in teaching, enriches and vitalizes instruction, and develops correct concepts. Through the teacher's generalship, initiative can be developed. teacher's generalship, initiative can be developed, powers of self-dependence cultivated, and the work made an effective tool in achieving the objectives for which schoolwork is intended.

-A new library has been installed in the junior high school at Owensboro, Ky. Equipment has been installed at a cost of \$2,100 and a drive for books has been begun by the students and faculty.

-At an election held on November 8, five members of the board of education of Owensboro, Ky., were reelected. Those reelected were Mrs. Marguerite Haynes, Mr. W. R. Jagoe, Mr. H. H. Smith, Mr. J. R. Laswell, and Mr. John A. Dean. Mr. Laswell has been a member of the board for the last twenty years and has been president for five consecutive years. The board of education consists of nine members.

AudioGraphic Music

AN OPEN LETTER FROM DR. FARNSWORTH

00000

Washington, D. C.

November 10th, 1927.

DEAR FRIENDS:-

It is my good fortune to be connected with the editing of the World's Library of Audio-Graphic Music just announced by The Aeolian Company. The work is under the direction of Mr. Franklin Dunham, head of the Company's educational department. I have, naturally, wanted to let my friends know about the new features that these rolls present, features that I believe will help towards a more intelligent enjoyment of music.

The name, "The World's Library" has been adopted because the editorial work is being conducted along international lines. The European Editor is the well-known English author, Mr. Percy A. Scholes, who is chairman of a representative committee of British musicians. Corresponding committees exist, not only in this country, but also in France, Germany and Spain. These various committees have been preparing the rolls for publication.

The new educational feature of these rolls is that they have *printed upon them* such varied material as pictures, phrase marks and words, so that the untrained listener receives the *double appeal* made to the eye and to the ear, much as does the trained musician when he watches the score while listening to an orchestra.

popular. The aim of the latter is to reach people to whom complete musical analysis itself would not appeal and who require incidents and stimulation of the imagination to enable them to "take-off" as it were. For in the art of music appreciation, as in flying, the one who experiences must go up by his own power.

in England, France, Spain, Germany as well as in this country. They naturally show a great variety of treatment. What will prove to be the most effective way of giving such aid is still on the lap of the gods. Your criticisms and helpful suggestions will be greatly appreciated.

Very sincerely yours,

Charles Harmsword

PROFESSOR OF MUSIC EDUCATION, EMERITUS TEACHER'S COLLEGE—COLUMBIA UNIVERSITY

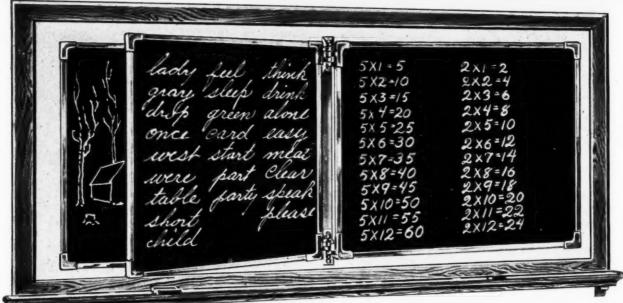
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With The Alternator, the teacher may prepare her blackboard lessons in advance and thus save time during the school period. The lessons and tests need not be exposed to the scholars until the proper time. To swing the boards in any position,

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The Alternator saves time, enabling the teacher to keep lessons from day to day. It is easy to handle, as there is nothing to lift. And there is nothing to get out of order, for the patented swinging device al-ways works perfectly! The cost is amazingly low. Write for Catalog

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CHICAGO CORRESPONDENCE

The board of education has abolished the bureau of instructional research and has transferred its director, Edward E. Keener, vice-president of the Educational Research Association of the N. E. A., to the principalship of the Lincoln "elementary" School. One of the charges against William Mc-Andrew, suspended superintendent of schools, is that he introduced a system of educational tests which "disconcerted the teachers and lowered their efficiency." The president of the school board, Mr. J. Lewis Coath, is quoted as saying, "the appearance of Keener or one of his helpers invariably struck dumb with terror and nervousness the teachers and children alike, for ratings in the super-intendent's office have been based on these unfair

The president of the school board has asked for the resignations of seven other "major generals" in the educational department. These persons are: Frank G. Bruner, M.D., Ph.D., director of special schools; Daniel P. MacMillan, M.D., director of the bureau of child study; Edgar C. Hinkle, secretary of the board of examiners; Henry S. Crane, vice-president of the board of examiners; Charles D. Lowry, assistant superintendent of schools; Anna M. Dwyer, M.D., physical examiner for women for the board of examiners; and Clarence E. DeButts, assistant superintendent of schools. The president of the board called them "social derelicts" and "incompetents," and threatened to prefer charges against them and remove them from the school system unless they resign their present positions. It was stated that they would be transferred to principalships.

Mr. McAndrew presented a written statement objecting to the unfavorable characterization of these school people. He said: "To subject anyone who has done good work for Chicago schools for twenty years or more to such a libel will hardly win public approval as an example of official courtesy. But, when it includes gentlewomen of recognized ability and excellent service it will be considered by many as counter to that sort of good breeding which your teachers are endeavoring to inculcate in your children.

"School workers have an honest and healthy respect for their calling. They are properly sensitive to esteem. They feel humiliation when the contrary is published regarding themselves or colleagues. A lowering of regard for school people

impairs the service of the whole system.

May I not, as a citizen interested in the schools and whom in a way you represent as you do all citizens, respectfully suggest that you officially disayow these statements and assert that they lack your approval and that you put yourself on record as holding that these teachers are entitled to the common American rights often asserted by Washington himself—that of being judged by their record and not by prejudice?

These people are your own. They have served the children, the parents, and the citizens of Chicago longer than you or I have. The effect of slander on them will no doubt cause them much cruel distress. But the larger public effect is likely to be the advertisement to the country that the manners of the Chicago school system are low, and to reduce the efficiency of other refined and enthusiastic workers in the schools by making them ashamed of the reputation of the Chicago organization.

The newspapers announced that Dr. Anna Dwver had secured the services of an attorney to start a libel suit and that she had also seen the mayor. The president of the board later withdrew his remarks concerning her, saying that he had meant another doctor.

Since her "break" with Mayor Thompson, Miss Margaret Haley, business agent of the Chicago teachers' federation, has apparently been at odds with President J. Lewis Coath, whom she has formerly sponsored as satisfactory to the federation. Miss Haley is much interested in securing an equalization of property assessments in Cook county and recently undertook to secure a \$100,000 fund for the purpose by means of contributions of \$25 per teacher. The following wordy tilt appeared in the October 25, 1927, issue of "Margaret Haley's Bulletin":

Mr. Coath:

"When I learned of the attempts made by this self-constituted leader to 'shake down' the teachers of Chicago for \$25 each, I feel justified in saying to the teachers that it is an insult to the intelli-gence and integrity of the members of the board of education."

Miss Haley:

The collection of that \$100,000 fund is not an attempt 'to shake down the teachers of Chicago,' but to shake up the board of review and the board of assessors of Cook county and to wake up the

people of Chicago and Cook county to the fact that there is adequate machinery provided by law for proceeding in an intelligent, orderly, and lawful manner to clean up the rottenness and lawlessness of the tax-assessing and tax-collecting machinery of Cook county, and to do it now." In an "open letter to the president of the board

of education" Miss Haley goes on to say:

"The following astounding announcement from you, Mr. Coath, as president of the board of education appeared in the *Herald-Examiner* on October 1, in the year of 'America First'—1927":

He (Mr. Coath) emphatically warned the Margaret Haley sympathizers that any teachers contributing to her \$100,000 fund for a real-estate survey of Chicago would be the subject of charges before the school board. If convicted they would be discharged, he said.

"Charges of mental incompetence will be filed against them if they contribute," he said.
With that threat of dismissal went the following

promise, for good measure:
"There will be no decrease in the salary of the Chicago teachers!"

Mrs. Helen Hefferan, the only woman trustee of the school board, said: "On Dec. 31, there will be only \$460,000 in the educational fund, and no money will be coming in from the new tax levy until late in February. Our weekly expenses amount to more than a million and a half dollars. (It had previously been said that the board's borrowing power is completely exhausted.) Unless something happens I don't see how the board can avoid paying the teachers in script." Newspapers had prophesied some such remedy for the money shortage as a 20 per cent lateral cut in all teachers' salaries, closing the schools during January and February, or payment of teachers' salaries ary and February, or payment of teachers sanctive in script. On his return from Washington, where he attended the flood-control trip with Mayor Thompson, Mr. Coath promptly stated, "There will be no cut in teachers' salaries. Neither will they have also san schools." be paid in script, and we will not close any schools.

The McAndrew trial is going slowly forward. The whole country seems to have been kept pretty well informed of events of the trial, including the shift in the attack toward the public library. Opinion seems to be quite crystallized by now into two camps, the anti-McAndrew and the pro-Mc-Andrew groups.

(Concluded on Page 132)

GEORGE L. HOSSFIELD

WORLD'S CHAMPION TYPIST

Another Victory! 22nd Annual World's Typewriting Championship Won on the UNDERWOOD

133 WORDS a minute for one hour! 41,232 strokes or more than 11 strokes per second! A phenomenal performance of speed and accuracy by the World's Champion Typist in establishing a NEW WORLD'S RECORD on the Underwood at the 22nd Annual Typewriting Contest, Carnegie Hall, New York City.

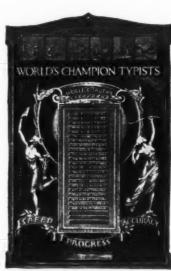
The World's Typewriting Championship, the World's Amateur Typewriting Championship and the World's School Typewriting Championship—all won on the Underwood.

Gov. Alfred E. Smith Trophy

won by Chester Soucek, Coraopolis High School, Coraopolis, Pennsylvania, at 81 words per minute. This trophy for speed and accuracy in typewriting was won in competition with 55 other contestants representing all sections of the United States and Canada.

A complete copy of the Official Records will be sent free upon request. Underwood Typewriter Co., 30 Vesey Street, New York City.





New World's Typewriting Championship Trophy

UNDERWOOD The Machine of Champions

Investigate the advantages and economies of BEAVER BLACKBOARD



for new schools or replacing old worn out blackboards

MAKE a thorough examination of Beaver Blackboard and you will find that it incorporates every requisite of a correct writing surface for the school. The surface is of a soft even tone with just the right texture to take chalk with sharp contrast. It erases and cleans easily too, and will stand years longer than most surfaces without graying or becoming shiny. And because the surface will not pit, chip, or crack and is backed up with 5 ply Genuine Beaver Board famous for strength and

permanence, Beaver Blackboard will last as long as the building itself.

The superior surface and durability of Beaver Blackboard do not conclude its advantages. The first cost, shipping expense, and application cost are surprisingly low. It comes in large, sturdy panels 3, 3½, and 4 feet wide and from 6 to 16 feet long—larger and lighter than slate or heavy composition boards. One man can quickly apply it with a worth while saving in time and labor it with a worth while saving in time and labor—in new work or right over the old blackboard, brick, plaster, or wood.

Some of the finest schools the country over are equipped with Beaver Blackboard where its excellent service and economy have won endorsement of school authorities, teachers, and archi-

FREE SAMPLES AND FOLDERS

Samples will prove its lightness, toughness, and fine writing surface. The folder "Better Blackboards" will tell you more about its advantages.

Write for them now, no obligation.

THE BEAVER PRODUCTS COMPANY, INC. BUFFALO, N. Y.

CHICAGO ATLANTA KANSAS CITY NEW YORK MINNEAPOLIS

TWO COLORS ~BLACK AND GREEN

(Concluded from Page 130)

Anti-McAndrew

The grand dragon of the Illinois Ku-Klux Klan has endorsed the "battle against British propa-ganda in Chicago," according to newspaper ac-counts. He states: "We are in harmony with any public official with the courage to carry the fight to the enemies of 100-per-cent Americanism.'

Several German-American societies in Chicago are reputed to have endorsed the attack on alleged pro-British influences in the schools.

Mr. Henry L. Mencken, literary critic, is said to be aligned with the prosecutors of the trial, although his quoted statements raise much suspicion of irony. His reasons as quoted follow: "Mr. Mencken takes the attitude that it has yet to be proved that there is any history worth teaching, and that if there is, which he doubts, it would be impossible to teach it to children for two reasons. First, because there isn't any teacher of history who knows anything about history, and second, because, the human race being made up of 99 per cent morons, it is impossible to teach them to think when they are children."

Mr. Frederick F. Schrader, former editor of The Fatherland, has testified from the witness stand concerning alleged pro-British influences

Mr. Frederick Bausman, lawyer and former justice of the Washington state supreme court, has similarly testified.

Mr. John J. Gorman, former Congressman from Illinois, and the one who made the original pro-British charges, has testified regarding the history books. (A \$100,000 damage suit has been instituted against him by one history text author, charging that he has misquoted passages in the book and that he stated this particular book was barred from the schools of two states.)

Two public-school teachers have been called to the witness stand, one relating how the pictures "Spirit of '76" and "The Boston Tea Party" mysteriously disappeared from the walls of her classroom after the principal had requested her to remove them and she had refused; and the second teacher testified to a "teacher-revolt" in a history class at the University of Chicago because of the professor's defense of an allegedly unpatriotic college history text.

The Hearst newspapers in Chicago apparently

endorse the prosecution of the trial. The American

states editorially, "The present campaign to give Chicago school children history texts which teach American history from the American viewpoint is to be commended."

Chicago's mayor is bitterly anti-McAndrew and has been reported as saying that no other school system would want McAndrew after this exposé.

Other newspapers, citizens, and organizations have indorsed the suspended superintendent or else opposed features of his trial.

Delegates from 29 civic organizations adopted a resolution stating that "motives controlling those now in power in Chicago public schools are of a purely political rather than an educational nature and source. Four or five sessions of this trial, occupying as many weeks, have now been held; but the original charges on which the superintendent was suspended, and on which he can legally be tried at this time, have not been argued. Instead the time has been taken up by trivial and irrelevant matters, with the evident intention of prolonging the trial until the superintendent's term expires in February. In the meantime Chicago has no superintendent of schools. The president of the board has usurped the superintendent's powers, and the schools are being run without the professional direction which the law requires."

Dr. Louis L. Mann, rabbi of Sinai Temple, is alleged to have stated to 2,000 persons at the temple: "The ulterior motive of this King-George controversy is to blind the public to the farce of the McAndrew trial. Mr. McAndrew is one of the best, most efficient, and most courageous school superintendents Chicago ever had. The president of the board, Mr. Coath, has shown his unfitness for his

James Hamilton Lewis, former senator from Illinois, and Clarence Darrow have been quoted in

WHICH SEEMS THE MORE REAL PERIL? -Chicago Tribune

opposition to various phases of the trial or its ramifications.

Some of the newspapers have been most vitriolic in their condemnation of the stand taken by the prosecutors of the McAndrew trial, e.g.:

One daily paper refers to the school-board trial as "a farcical display of kangaroo court practices."

Another paper calls it a "monkey trial" with the power of the City of Chicago lined up on the side of "blah and buncombe." This paper goes on

"The danger point to the people of Chicago is in the board rooms of the department of education, where, under the guise of trying Supt. McAndrew for insubordination, the attempt is being made to sell out the school children in the interests of spoils politics.

"Chicago can live down the shame of being made the laughingstock of America and the world. mon sense and American neighborliness will cure the ill feelings aroused in this campaign to set foreign and unpatriotic allegiances at one another's throats. But the effects of the cheap political attack on the school system will long persist. Resilient as youth is, the generation now in the Chicago schools cannot help but be marked by being made the victims of demagogic barter and

Another newspaper hints that some people suspect that "the drive on the school system, of which the textbook orgy is only one episode, and which was begun in the spring campaign, has neither high ambition back of it, nor even scoundrelly patriotism, and that it smells to heaven of rotten graft." Cynically pointing out that Chicago has the largest textbook bill in the country-\$989,000-it continues: "With all present texts discarded, a tidy fortune awaits the firm which publishes a 100-percent-American text for more than 500,000 American children."

The United States Bureau of Education has issued a handsomely illustrated pamphlet devoted to the "Playgrounds of the Nation." It deals with the summer and winter camps provided in national parks. The wonders of nature are graphically un-Animal and vegetable life are attractively

Are you using these tabular tests?

TEW in the field of typing test material is a series of special tabulating tests developed by our School Department for use in connection with the inbuilt decimal tabulator.

With the aid of these tests the different forms of tabulation and billing work are easily and thoroughly mastered by the student. As a result, he is enabled to enter business fully equipped to handle varied types of work efficiently.

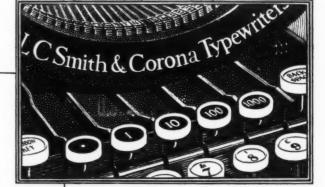
Further information regarding these tests may be obtained by writing to our School Department.

L C Smith & Corona Typewriters Inc

School Department

Syracuse, N. Y.

L C Smith Inbuilt Decimal Tabulator Chart



How to Set Tabulator Stops How to Tabulate For Words For Words For Numerals For Numerals 100 1000 For Decimals For Decimals 100

L C Smith & Corona Typewriters Inc

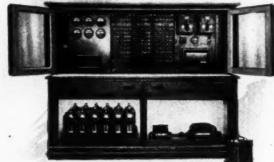
Above:

Close-up of L C Smith inbuilt decimal tabulator. Only L C Smith comes equipped with this important feature at no extra cost.

At Left:

Reversible keyboard-tabulator wall chart simplifies instruction for the teacher. Sent free on request.





Laboratory Panel for Schools



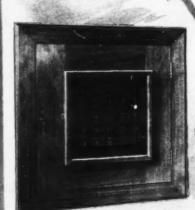
School Flush Phone

LABORATORY PANEL

A complete panel designed especially for use in High Schools and Colleges which have physical, chemical, or electrical laboratories and lecture rooms.

The instruments, wiring, and arrangement of the panel shown above have been based solely on the requirements of school laboratory work and the unit method of construction allows the making up of large or small panels to meet any requirement.

Full particulars will be sent upon request.



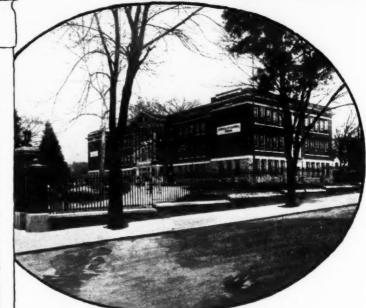
Masters Annunciator

Manufacturers of Signaling Systems for over 50 years

THE HOLTZER-CABOT ELECTRIC COMPANY

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tewarte



Where Stand-up-Ability Is Needed

SCHOOL fence calls for real fence quality—strength and ruggedness and the ability to stand up under more-than-usual hard service. Yet the matter of good appearance is a factor, too, that must be considered.

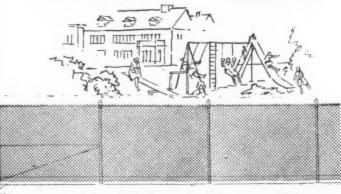
Stewart Fence—whether of Wrought Iron or of Chain Link Fabric—affords that happy combination of serviceability and attractive appearance which conforms with school requirements. It protects, and at the same time beautifies.

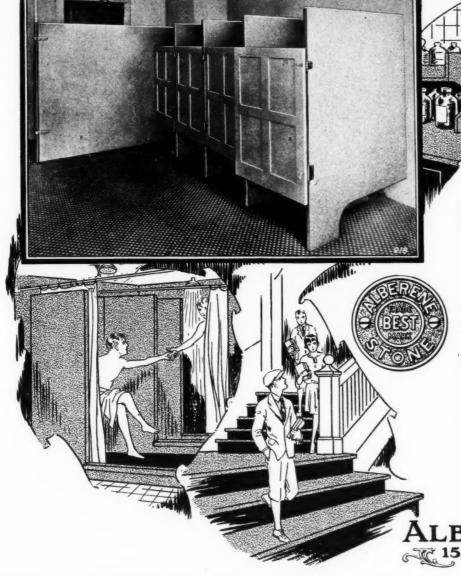
Write for the Catalog of the Comprehensive Stewart Fence line.

THE STEWART IRON WORKS CO., Inc.

Representatives in all Principal Cities

420 STEWART BLOCK, CINCINNATI, OHIO.





SANITARY—
As Well As
DURABLE

FOR sanitary work, Alberene Stone offers advantages no other material has. Not only is the stone itself non-absorbent and non-staining—it is fabricated and assembled with liquid-tight, germproof, tongue-and-groove joints which give no lodgement for moisture or dirt. And there is no splitting or flaking or spalling of the stone. Its surface is always smooth and cleanable.

Let us send the catalog describing Alberene Stone for sanitary work, showers, stair treads, laboratory equipment, and other purposes.

ALBERENE STONE CO.
153 WEST 234 St. NEW YORK CITY.

THE ERA OF SCHOOL-BOARD CONVENTIONS (Concluded from Page 38)

only can anticipate the questions but is well equipped to answer them. He reports on this phase of the work as follows:

"Of the hundreds of questions asked during the month of September, 1924, the following are typical:

"1. Please describe the duties of each member of the school board.

"2. Explain the law governing the school treasurer's bond.

"3. Give the laws governing the pay of the clerk and of each other member of the board.

"4. Which member of the board elects the teacher?

"5. We are interested in a union free high school. How may one be organized? What are the advantages of a union free high school? How does one differ from a consolidated high school? Are elementary grades attached to a union free high school? Would you come out to our community to talk to our people and assist in organizing the kind of a school our people might decide they want?

"6. Should children be kept after school to study lessons?

"7. How is a vacancy occurring in the school board filled?

"8. When a teacher is no good how can we get rid of her?

"9. When may a child attend school in another district and require his home district to pay his tuition?

"10. How much tuition can be collected? What if they refuse to pay it?

"11. What can we do to make our school a first-class rural school so as to receive the fifty dollars of special state aid?

"12. Why did our state graded school not receive its special state aid last year?

"13. What good is a contract with a teacher?

"14. Discuss the law governing school transportation.

"15. Does the law forbid a married woman from teaching school?

"16. Has a teacher a legal right to refuse to teach a five-year-old child when he is present in school?

"There is an increasing interest on the part of the people in these conventions. Over twenty-three thousand people were in attendance last year and the attendance this year promises to be still better. This year the first convention was held Saturday, June 10, at Eagle River, Vilas county, and the eightieth and last one will be held in Milwaukee for Milwaukee county, Friday, December 9.

"We are grateful for the cooperation and kindly feeling of sympathy one to another that is almost universally evident among the people. They assemble for consultation, help, instruction and inspiration and the end of a good long day of a busy school-board convention usually finds them starting home saying this has been a real good meeting. The result of the meeting is made by what they get from one another as much as by the appreciation of what they may receive from the leader and speakers on the program."

VALUE OF STANDARD TESTS— TWO CASES

(Continued from Page 34)

done about chronological age, and one would not want to equalize by bringing mental age down, if he could. Since the educational age is exactly equal to the mental age, it shows that Louis is working up to capacity; that is, his educational quotient is 100. Louis was in 6B grade; since he was head and shoulders above any other child in the grade, and since the grade had little more to offer him, he was given a double promoPROFILE GRAPH OF FIVE CHILDHOOD AGES

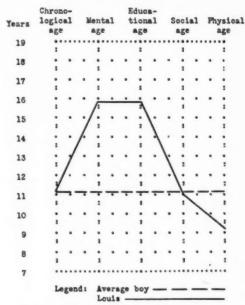


FIG. 2. PROFILE OF AGE OF LOUIS S-

tion in spite of his low physical and social ages. He is making good.

In an attempt to increase his social age more rapidly, Louis has been given responsibilities. He is too frail to serve as a basement monitor or patrol boy, but he was made head bell boy in charge of morning, noon, afternoon, and recess entrances and dismissals. He tutors other boys as his assistants in this work.

The greatest promise of improvement comes in his physical age. Mr. W. L. Kirkland, director of boys' athletics at Hull House and an official in the Jewish Peoples Institute, was interested. Through his efforts, Louis was sent to Camp Hutchinson at Waukegan, Illinois, dur-

All These Advantages



— are gained when you install Rundle-Spence Vertico-Slant Fountains.

The thirst of all is satisfied sanitarily—lips can't touch the R-S nozzle—the slight slant stream prevents water from falling back upon the jet. R-S Fountains take up little space, and check the waste of water. They give continuous service the whole year 'round, and add new beauty to their surroundings.

The R-S line includes Sanitary Drinking Fountains, Bath and Plumbing Fixtures and Supplies. Write for catalog with complete information.

RUNDLE-SPENCE MFG. CO. 51 Fourth St., Milwaukee, Wis.





Handsome vitreous china one piece fountain. Combines all the conveniences of the vertical stream with the special slanting stream feature. Glass or cup may easily be filled from it.

C 147

A pedestal fixture of galvanized pipe with extra heavy vitreous China bowl and vertico-slant stream. An extra strong fountain for the playground.



ing the summer. In a further effort to aid him physically, his case was called to the attention of two social workers at the Michael Reese Dispensary. Miss Marjory Hampton visited his home and discussed diet and food values with his mother.

It is too early to speak with assurance about Louis' future. He has gained a lot in weight. He has spent another summer at camp. He has been given a mental hygiene examination. He has been given another double promotion and is now in high school. The attention of one or two social-psychologists is focused on his case, and his future is being supervised.

Here again, standard tests in the hands of school people, apparently have discovered and will salvage a potentially brilliant citizen.

OBJECTIVE MEASUREMENT OF TEACHER-TRAITS (Concluded from Page 43)

By investigation of the amount of reading necessary to keep up with the progress in the general and the specialized forms of education, concrete terms could be used to measure a teacher's activity in her profession. A knowledge of the school laws that apply to a teacher and her work will make the teacher's work more effective, and enable her to avoid embarrassing and troublesome situations. Objective checks on these and other marks of professional attitude could be easily devised.

It is neither necessary nor desirable that objective measurement of the tangible qualities necessary for teaching success should stop when the graduate enters the teaching field. Data should be collected and compared for several years afterward. Extended experience with such objective measures and a definite terminology will extend and refine the units of measure.

The advantages of using objective measures for tangible teacher-traits are evident. The teacher will find the position for which she is best fitted; her pay will be more nearly that which she merits. Administration will be easier. School officials, by avoiding misfits for their particular schools will save the public money.

STORES CONTROL

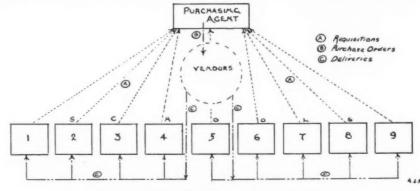
(Continued from Page 44) to all schools, should be stored in the central stockroom, and should be issued only on requisition by responsible officers, or they may be sent out on the basis of a monthly allowance,

based on a budget or estimate.

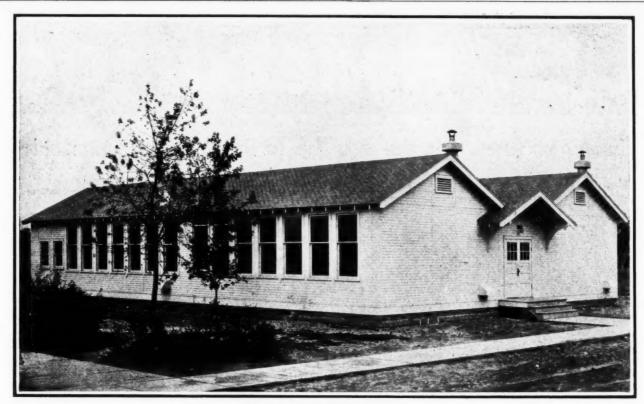
There is quite a common opinion among schoolmen, that the work involved is not justified by results. This is made by men, who, as a rule, are under a misapprehension, first, as to what is actually involved by scientific stores control; or, they fail to appreciate the reality of waste in schoolwork.

As an illustration, let me quote the case of a superintendent who was satisfied to "O.K." requisitions as long as they looked all right, based on previous experience extending over a number of years. When it was pointed out to him that perhaps the idea of conservation and economy had never existed in his schools, there-

fore, to follow precedent was only to perpetuate a custom or a fault which might easily be remedied after a little scientific investigation, he saw the point, and a thorough investigation was made in each school in his district. The result was astounding! Literally hundreds of pieces of pencils of short lengths, but usable, were discovered in different places, evidently collected by teachers who had an economic quirk, but didn't know how to use it to the best account. A great deal of spoiled paper was collected, spoiled, not by children and students, but by dirt, careless packing which resulted in crumpled edges, and other causes positively preventable, under a well-organized system of control and storage. The immediate result of this investigation was, not the installation of a proper stores-control system, but a material increase in cupboard and storage room in the individual schools; and probably this was the very best thing to do at the time. It was later found, after careful comparison, that there had been a too-liberal standard of allotments, which had been accepted without serious question for (Continued on Page 138)



METHOD OF STORES CONTROL WITH DIRECT SHIPMENTS
CHART III, DECENTRALIZED STORES CONTROL.



TOGAN FOUR-ROOM SCHOOL

There's No Guess Work with Togan Schoolhouses

You know in advance how they will look, how they are constructed, when they can be completed ready for occupancy, and how much they will cost.

The uncertainties of the local carpenter-built method are entirely eliminated when you buy a Togan. Designed and passed on by experts, they conform to the strictest school-building laws in every state.

Togan construction permits quick, easy erection and gives greatest strength and life-time endurance with

a minimum of time and labor. Built up at the factory and carried in stock, they can be shipped promptly on order.

Produced by an organization with broad experience in developing a highly-specialized product, Togan schools leave nothing to be desired from the standpoint of appearance, quality, and service.

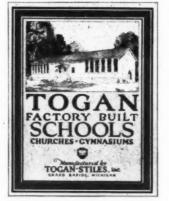
You can choose any Togan school with the full assurance that it will be fundamentally correct in every way—that it will provide all the necessary comforts and conveniences found in the most elaborate structures at a fraction of the cost.

If desired, a factory representative will supervise the actual erection of a Togan school and turn the building over to you in a few days ready for use.

Standard Togan designs consist of one, two, three, and four-room schools, planned in several alternate arrangements to cover a wide range of requirements

> for both large and small communities. Special designs where greater capacity is desired, upon request.

> Why be satisfied with less when a Togan, with its many advantages costs no more? Send for the new Togan School Catalog which illustrates and describes a variety of attractive designs and alternate plans for every requirement. Copy mailed upon request.



TOGAN-STILES, Inc.

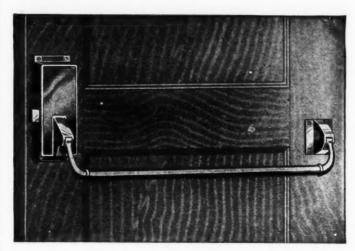
1609 Eastern Ave., Grand Rapids, Mich.

Eastern Office, Togan-Stiles, Inc., Newtonville, Mass.



Smith's PANICEXIT LOCKS

Smith's Improved Exit Locks are the Best Locks Made for Schools, Theatres, and Industrial Plants



Patented Dec. 1, 1925





Made in solid bronze or solid brass throughout. Exceptionally strong and simple in construction and operation.

Exit only Lock contains only 4 working parts.

Exit and entrance Lock contains 9 working parts.

Can be used on single doors or on double doors with center mullion. Size of case, 9 x 3¹/₄ x 1¹/₂ in.

Installation made very quickly—No Mortising required.

No auxiliary bolt required, therefore no delicate

Only one spring and that to eject bolt.

Positive locking feature operated with heavy gears, and not depending upon springs.

Permanent dog under cam, so constructed as to take up any wear which might occur.

Bolt projects 3/4 in. from lock case, enabling bolt to have sufficient contact with strike in the event of door shrinking.

Ideal for thin as well as heavy doors.

Operates perfectly in conjunction with standard make of door closers.

Made to meet the use and abuse to which a school door lock is subjected.

The Steffens - Amberg Co. New Jersey

FOR CATALOG

(Continued from Page 136)

several years, with the result that the teaching staff had been educated to extravagance.

This is an extreme case, of course—a more general complaint, on the part of teachers at any rate, is that we are not liberal enough in this regard-but it is an illustration of the fact that there may be abuses going on of which we have no conception, and which are the more insidious because they are impersonal. In another city, the finance committee refused to recommend the purchase of additional school equipment, and this forced the superintendent to rummage around through the schools until he had collected enough unused and broken desks and chairs, blackboards, and other pieces of furniture to completely furnish another schoolroom for which he thought he needed new furniture! This experience was so illuminating to him, that he told me that he had a carpenter around the school for several weeks; he never knew before how easy it is to mend things, and put old furniture back into commission.

All this is a strong argument for centralized control. After many years of experience in this country, and in Canada, in government organization, the excellency of concentrated control of purchasing and stores, is more than an opinion with me; it is a conviction supported by much evidence of the benefits accruing wherever it has been substituted for decentralized control. Nevertheless, I am not blind to

How Decentralized Control May Work

by much evidence of the benefits accruing wherever it has been substituted for decentralized control. Nevertheless, I am not blind to the advantages of direct shipments and decentralized control, under certain well-defined conditions. In the third chart of the series, I have shown how this operates. Under this arrangement the only way to get effective control of consumption is to furnish each school only with enough material to meet one year's

needs, based on accepted standards. Frequent checking-up must be resorted to, to see that supplies are being issued in accordance with these standards, if a current control is needed. The alternative plan is to have a storekeeper in each school, who shall be directly responsible to the superintendent and shall make a daily, weekly, or monthly report to the superintendent's office, of what has been received and issued, with a report of class and school population for the period covered.

There is a second alternative, which depends for success entirely on the human element. In one small school department with which I am familiar, this is working with gratifying results: it is the intelligent and effective cooperation of each school principal, who combines with academic training, a business sense. In the town referred to, a uniform system of control of school supplies and material, is maintained in each school, each school virtually being a substore. A proper book record (actually, a card record, in this instance) is kept up daily, and at the end of each school week, a report is made to the superintendent's office, where a control account is maintained of all purchases, shipments, and issues. It would be almost too much, however, to expect such ideal cooperation between executive office and schools, in a large city or in many country districts. Even where the good intention might exist, the inexperience and disinclination of many school teachers and principals in, and towards business routine, would militate against efficiency.

The Clerical Requirements

We have examined three systems of stores control which, from experience, have proved effective under certain conditions. Space will not permit of a discussion of the clerical detail involved in each of these, but mention may be made of the fundamental requirements of any system of purchase and stores control: They are (1) purchase orders, (2) certificates of receipt of supplies and material—often called "receiving slips", and (3) stock records—these are individual records which show receipts and issues in such a way as to furnish a perpetual book inventory of everything carried in stock.

An important phase of this subject, is that which has to do with a proper audit of all purchases of supplies and material. In acounting parlance, the "three-way-check" is the ideal to be attained. This is obtained by "matching" three documents, before passing any material account, for payment: (1) the office copy of the purchase-order concerned, (2) the receiving slip signed by the storekeeper, and (3) the invoice from the dealer. Only when these are all in agreement, should the account be passed for settlement.

In considering the desirability of effecting a change in the system of storekeeping, the following consideration must be studied carefully:

- a) The present cost of handling and shipping supplies.
- b) The necessary increase, or the possible decrease, in personnel, clerical labor, and book records.
- c) In what way, and to what extent, would the service be improved by the proposed change?
 d) In what way, and to what extent, would effectual control be established?

With regard to the first consideration, cost may not be the first consideration, but it is always an important one. Centralized control of all stores may mean the purchase of a truck; the cost of operating the truck may exceed—as it probably would—the saving effected by closing decentralized stores units. But if there is good ground for expecting that the resultant (Concluded on Page 140)

Power-Speed -Flexibility



School director and janitor—business man and cleaning expert—will see in the above picture how economy of time and current has been built into the National Super Service

The sturdy motor is the most powerful ever mounted on an easily portable cleaner. It can be drawn by a thread—literally—and follows the operator without his conscious effort.

Up and down the aisles — through spaces no other portable of even approximate power can pass—wihout loss of strength in long lines of piping.

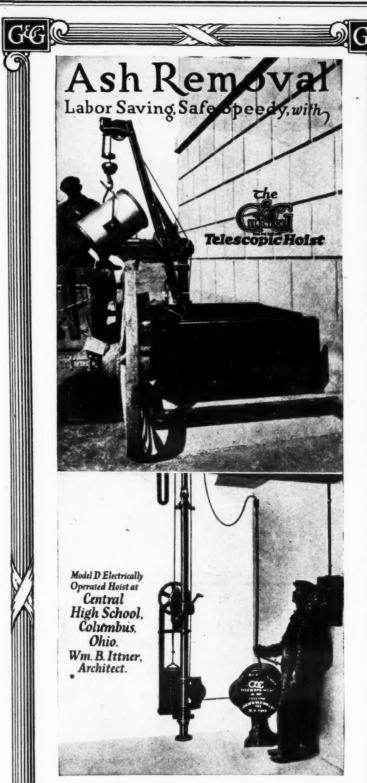
Power close to the work; that explains its marvelous efficiency. Larger plants with remote motors, must use much more current in order to deliver at the tool mouth a fraction of the suction they create.

A motorized cleaner where the cleaning is done —the principle efficiency experts recommend in modern machine shop practice, to obviate the enormous losses from long lines of shafting, belts, etc.

That's the basis of National Super Service economy in electricity, in time, and in low cost of installation.

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ORE than 1550 schools are G&G equipped. Schools must be free from accident-traps. Note how the G&G sidewalk doors and spring guard gate fully protect the sidewalk opening. The doors lock automatically when open or closed. Nothing is left to chance.

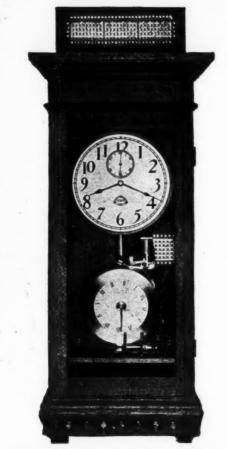
Note also the extreme simplicity of this arrangement. Two men easily and quickly do the work of 5 or 6. There is no confusion, no needless noise. The overhead crane model illustrated permits ash truck to drive up alongside of hoistway. There are also G&G "one-man" models, both hand-power and electric, for use where cans must be removed across sidewalk to curb. Sturdy construction assures years of hard service. Electric models use surprisingly little current. Complete details on request.

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economies in consumption, due to tighter control and the stoppage of all sources of leakages would be so considerable as to absorb the extra expense of stores administration, then there can be no question but that a change is fully justified.

In a country-school district, a central store was established, necessitating reshipment of supplies over a wide area, yet, notwithstanding this disadvantage, a much better and more satisfactory control over all supplies was effected, without an additional cost to the administration. How was this accomplished? By utilizing the school busses for delivery service as well as for transporting pupils.

When more business executives of schools begin to adopt the same attitude toward the consumption of school supplies and material, as is common in every large industrial plant, and which is largely responsible for scientific production on a known cost basis, we shall appreciate more than we have in the past, that the cost of public education is still too high; or, shall we say, higher than it need be?

BRIEF SKETCH OF THE PROBLEM OF PUBLIC-SCHOOL FINANCE

(Continued from Page 63)

funds are made partly on the basis of effort thus measured, then Strayer's criticism seems to lose its weight.

To make the point clearer, let us take two districts, A and B, alike in number of children to be educated, or in need, but unequal in full real valuation, and apply the proposition of Updegraff to them; measuring effort as I have suggested in terms of ratio of tax to real valuation

	Real	Amount	Rate to
Va	luation	Needed	Raise
A\$1	40,000	\$1600	4 mills
В 1		1600	10 mills

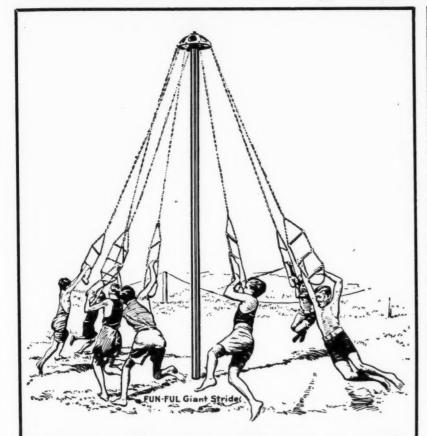
It is perfectly obvious which district is making. the greater effort, and which, therefore, should receive the greater assistance from state funds. If effort is measured in this way, Updegraff's method does equalize and stimulate both. On the other hand, it is also obvious which of these two districts, from a purely economic standpoint, would respond more easily to the stimulus of financial aid from the state, if this response would demand that the district raise \$800 additional by local tax. To A this would mean merely the addition of 2 mills to its rather low existent rate; but to B it would mean the addition of 5 mills to the already high rate of 10 mills. If, now, aid is to be granted on the basis of the increase in tax in the local district, it becomes apparent that there is point to Strayer's claim that stimulation will defeat the purpose for which equalization is invoked. It appears to me that there is a place where these two men can stand together on this very important point, if they can only bring themselves to see the merits of the other's viewpoint.

It is the writer's view that the fundamental purpose of all state apportionments ought to be the equalization of the very unequal opportunities that have been previously shown to exist. However, this must not be understood as implying that complete equalization is possible or even desirable. For the only way in which complete equalization could be brought about would be for the state to levy all taxes and apportion all funds. The folly of such a procedure is illustrated by the experience of Connecticut with its income from the permanent school fund which was used to pay the expenses of the local districts, or at least that was its final effect. The state distributed the money to all the districts equally, and the result was that they relied upon these funds, and cut down on their local taxes, failing thereby to improve their schools and losing all local educational initiative. We do not desire to have any such state of affairs, even at the cost of failure to equalize educational burdens and opportunities. Fortunately neither of these extreme conditions is necessary, thanks to the careful study that has already been and is being given to these problems.

It remains to test some of the states with respect to how well they are endeavoring to meet the responsibility which follows the fact that education is assumed to be a state obligation in the United States. In spite of the suggestions which have been made periodically by state superintendents of public instruction in most of the states, and in spite of the excellent study of Cubberley of school funds and their apportionment, resulting in conclusions which compare quite favorably with the best that is being done today, we still find thoroughly unscientific methods of apportionment in most of the states, and in many states methods of apportionment which are readily recognized as thoroughly inequitable. It would be hard to find on any point greater divergence than in methods of distributing the proceeds of the state school fund. There are all sorts of permutations and combinations of the factors of aggregate attendance, average daily attendance, special activity, and per teacher, and each of these may have many sorts of limitations and qualifications. This is only another way of saying that most of the methods are an attempt to compromise what is admittedly bad with what is hoped may prove acceptably good.

There is another factor, however, which is illustrated by the experience of Massachusetts. That factor is experimentation and testing. The apportionment of school funds in Massachusetts has been in a constant state of flux, because the schoolmen of the state have frankly faced the inadequacy of what is, and have tried out what gave promise of helping the situation,

(Continued on Page 143)





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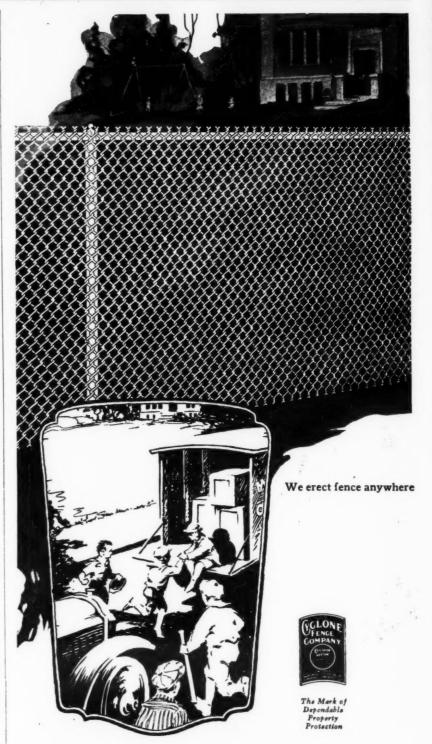
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Gentlemen:

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We are glad to say a word for Dudley padlocks,
they have proved most successful for our use.
Inglewood Union High School District has used
Dudley padlocks for two years purchasing
sufficient this summer to use on all service
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Thank you again for the football schedules.

Yours truly,

Leave Market Drive
Summer truly,

Leave Market Drive
Summer truly,

Leave Market

MB: EE
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(Continued from Page 140)

rather than let well enough alone. Dr. Fletcher Harper Swift comments that changes which were rather fundamental have been made more often there than in any other state. California has had somewhat of the same experience. Is it fair to say that this willingness to change accounts for the fact that Massachusetts and California have developed some rather sound and substantial procedures for attaining the ends set up previously in this paper in regard to distributing state school funds?

From the data gathered by the Educational Finance Inquiry in Volume VI we find that there is still one state, Ohio, which bases its appropriation of state funds, in part, upon a pure population factor, the provision being that the funds shall be apportioned to the counties in proportion to the number of male inhabitants over 21 years of age. It is obvious that this method bears no necessary relation to the schools, and is, therefore, not a sound basis for apportionment. There are several states which provide that the poll tax collected for schools shall go to the counties from which it was collected. This amounts to practically a population basis for apportionment. Even New Jersey, progressive in many ways, provides that 90 per cent of the state tax shall be returned to the counties in which it was collected. This means that the state fund resulting from taxation is apportioned according to wealth or property, which most assuredly is not an educational basis, nor an equitable basis.

A step above these come the states which apportion according to the number of children of school age, the commonest ages specified being 5 to 21, although this varies greatly in the different states. Of the 48 states, there are 27 which use this basis strictly, and three others which use "school population," which seems, upon further examination of terminology within

the school law, to mean the same thing. Clearly, this basis is an attempt to take into consideration the needs of communities for education, and is to that extent an educational basis. The difficulty with it as a means of apportioning funds is that it does not apportion the money according to the actual educational employment of the money, since not children in school, but merely children in the community, furnish the basis of apportionment. This scheme does not encourage communities to get their children into school, and may even have the opposite effect. However, it is a step in advance of the population or property basis, in that it does recognize at least potential educational basis, or need.

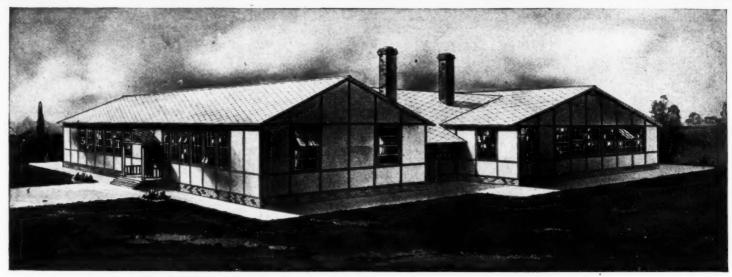
A further step in advance, which recognizes the factor that is neglected in the previous plan, is the plan of apportioning on the basis of average daily or aggregate attendance. Nine states use this in whole or in part. This method emphasizes the effort of the community in the direction of getting their children into school, but, under the compulsory-education laws well enforced, does not recognize the need of a community for state aid. As modified in my own state of Washington, it helps to equalize opporportunity in rural districts by providing that, if a school has too few pupils to equal 2000 days attendance, it shall be credited with enough additional days to make the total number on which its share of the state fund shall be determined 2000 days. Thus the small rural school is aided, but still not in any way is aid given to poor districts either rural or urban.

California makes an interesting combination or average daily attendance with a per-teacher apportionment, by apportioning to the county \$700 per-teacher-allowed; and the law states that a teacher shall be allowed for each 35 children or fraction thereof not less than 10 in average daily attendance in the district during

the previous year, as well as providing for teacher allowances from the fund for supervision on the basis of much larger number of children in average daily attendance. This might be called a per-standard-teacher basis of apportionment, and has certain advantages over the per-teacher-employed basis, as well as certain disadvantages. Many states employ the per-teacher basis in some form or other either in whole or in part as a method of apportioning the state funds. Of the schemes presented thus far, this seems to guarantee best an equal share in the state funds, since the teacher, at least from the point of view of cost, is a far more significant unit than the pupil in average daily attendance. However, since the state contributes on the average, less than 25 per cent of the total cost of schools, even this method does not equalize the burdens and the opportunities as between the poor and the wealthy districts.

Twenty-two of the states, in one way or another, and more or less liberally, make provisions for apportionments which are based clearly on needs of relatively poor districts or relatively small schools. For example, New York apportions part of its state funds on a basis which makes the sum granted inversely proportional to the assessed valuation of the district, while Pennsylvania assigns a percentage of the teacher's salary in inverse ratio to the valuation of the district. These are steps in the right direction, so far as equalization is concerned, though neither of them goes far enough.

Twenty-six states recognize more or less adequately in their scheme of apportionment the effort made by the local district to maintain and improve its schools. Minnesota furnishes a good instance. The law provides that, if any district, by taxing itself 20 mills, is unable to raise \$40 per child enrolled for not less than 40 days, then the state will assign to the district



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These schools are constructed from unit sections that can be quickly bolted together, making them very economical to erect.

"The Liberty" school provides abundant light, air, and floor space to meet the most exacting requirements. Interior and exterior walls, ceiling, and roof are of unburnable asbestos materials.

Other features include a well-lighted coatroom for each classroom, ample storage space for books and equipment, and vestibules that keep out the wind.

These schools are supplied in various sizes from one room up to Consolidated or Community Schools. They have been approved by the Departments of Public Instruction of Pennsylvania and New Jersey for permanent school buildings and undoubtedly will meet all requirements in your own state.

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that amount which will make up the difference. This sort of procedure is typical. Another form of the same procedure is for the state to grant certain aid if the local district will raise a like sum or meet certain standards set up. This is stimulation, as defined by Cubberley and by Updegraff. The latter has probably the more carefully worked-out plan, as would be expected, but Cubberley, of course, blazed the way by his penetrating conceptions set forth many years ago, before these problems became so generally studied.

To sum up: The problem of educational finance grows out of very obvious current conditions: first, the increasing costs of education; second, the unequal distribution of wealth to be found throughout the country. Its solution will be found along the line of three main channels of effort: first, to develop a system of school budgets which will make a convincing evaluation and statement of the needs which any community, state, or county presents to be met by education; second, to evolve a taxation program that will subject all forms of wealth, and all income especially, to the necessity of meeting its just share of the burden for schools, or to raise the money where the wealth and income exist; and third, to apportion funds thus gathered in such a way as to gaurantee to all children, not only as nearly as possible equality of educational opportunity; but also an education increasingly adequate to meet their own and society's expanding needs.

TRAITS AND QUALIFICATIONS OF SCHOOL-BOARD MEMBERS IN OHIO

(Concluded from Page 41)

and 92 per cent owning their own business in listed most frequently by superintendents are whole or in part. It is interesting to note that the five desirable traits and qualifications open-mindedness, a good education, an interest

in good schools, success in business and willingness to cooperate with the superintendent. These traits are indicative of the broad-minded individual. There is further inference to the effect that the small village and rural school-district boards attract men of narrower caliber than the boards in the larger districts. The village and rural school districts are under the control of the county board, and the honor and privilege of being a member on these boards is not as highly prized as it should be to attract the best type of men. It might further be predicted that these small districts will be the first to disappear in favor of a larger unit such as the county school district.

THE CLASSIFICATION OF ELEMENTARY-SCHOOL PUPILS ON A NON-GRADED BASIS

(Concluded from Page 37)

In addition to this, each individual child's record card filed in the superintendent's office shows:

Pupil's name.
Place of birth.
Date of birth.
Parent's name.
Parent's occupation,
Parent's name.
Parent's occupation,
Parent's name.
Parent's name.
Parent's name.
Parent's name.
Residence of parent.
Log. (test used).
Recommendation for next year:
Arithmetic grade 6
Reading grade 7
Spelling grade 6
Language grade 5
Other subjects grade 6

At the opening of school for the next term any pupil who seems to have been wrongly classified, or any new students may be classified, by giving the same standard tests and then giving a grade placement in each subject, according to the standards by which other pupils have been grouped. These standards are shown on each of the records filed in the superintendent's office.

Teachers' Criticisms

Near the end of the 1926-27 school year the teachers who participated in the operation of this program were asked to write a discussion on what they considered the benefits of classifying by achievement and educational needs. A summary of their opinions follows:

1. It adapts the instruction to the needs of the individual child. It is a step toward adapting the school to individual differences and the instruction to individual needs.

It provides assignments that fit the abilities of students.

It makes possible a better quality of classwork.

4. It makes group instruction easier because classes are more homogeneous as to pupil abilities.

5. Pupils are better able to comprehend the work.

6. It creates greater interest and more effort on the part of the student when he knows that he will be allowed to forge ahead according to his ability.

7. It creates greater general interest in school among teachers and pupils.

8. It stimulates competition among pupils.

9. It does not create confusion. A superficial glance at the program might lead one to think that it involves much confusion, but such is not the case. After the first ten days of school, each child knows when and where to go, and the necessary moving around is accomplished with very little disturbance.

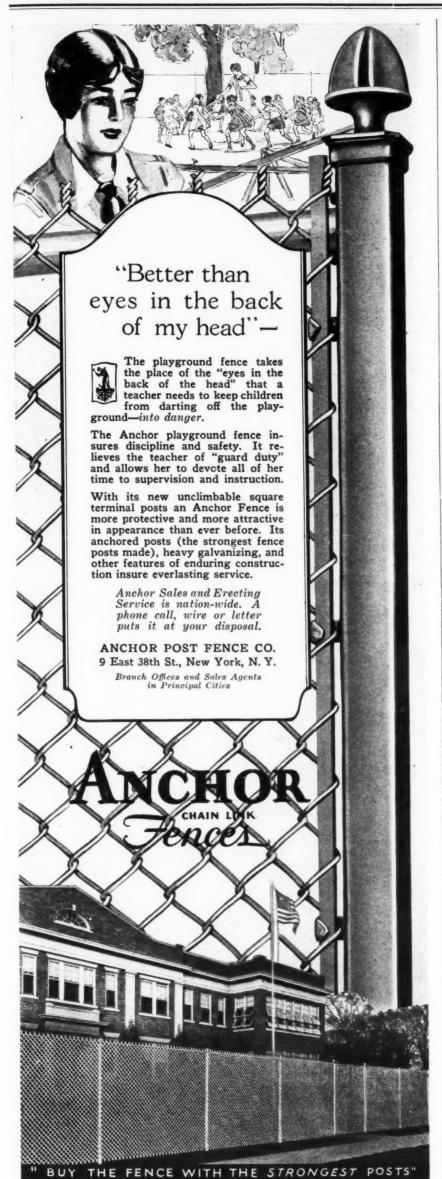
PUBLICATIONS RECEIVED

After the Rain. Cleanliness customs of children in many lands. By Grace T. Hallock. Paper, 96 pages. Published by the Cleanliness Institute, New York, N. Y. The author in teaching cleanliness to school children has utilized simple tales of child life among people in the far-off quarters of the globe. The stories are told with simplicity and charm and are intended to stimulate an interest in the part played by soap and water in the promotion of health. The neatness of Holland, the quaintness of France, and the peculiarities of Africa, are here told in a way that helps children to realize that the (Concluded on Page 146)

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introduced three years ago—and now accepted as the most efficient and economical towel service by over 400 schools...

Expenditures for most schools are observed with a critical eye. Many school officials have learned that Dubltowls help them keep within their budgets. As a rule, wherever these towels have been given a trial, they've gained a permanent place—becoming standard equipment.

Dubltowls can greatly reduce the cost of towel service in schools. Correct size—no waste. One Dubltowl wipes dry. Its efficiency stops careless children from using more than one.

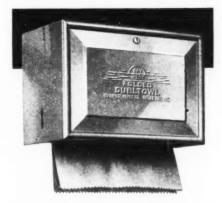
Dubltowls do not tear or break. Soft as old linen. Can be used as readily on the face as on the hands. Dispensed from neat Dubltowl cabinet or your present standard size equipment. Size of sheet 10¾ x 10 inches. 150 Dubltowls (300 sheets) to the package. 25 packages per carton.

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Cabinet, with 4 packages of Dubltowls, sent on request for free trial. Mail the coupon.



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A Bay West Wash-Up Kit (combination of Dubltowls and soap sheets) to fit door pocket of auto will be included.

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(Concluded from Page 144)

children of all mankind seek the same common ends and that the ideal of cleanliness is fundamental to those ends.

Student Employment in the Lincoln School. By Fred Strickler. Paper, 36 pages. Price, 30 cents. Issued by the bureau of publications, Teachers College, Columbia University, New York City. The booklet describes the employment bureau and its method of operation. It discusses the worth of employment to the school, its economic worth to the students, and features which might improve the employment service. There is a table giving in detail the classifications of work done by students.

Varying Types of Service Rendered Georgia by Teachers. By J. O. Martin. Paper, 45 pages. Issued by the state education department, Atlanta, Ga. The purpose of the study is to show the qualifications of the white teachers and what may be done to train an adequate number for the public schools. In the study an effort has been made to show the relationship between the degree of training and the size of school, the length of service, the supply and the demand for teachers. The study concludes with a list of recommendations.

Progressive Word Studies. Paper, 20 pages. Published by the American Book Company, New York City. A manual of information and course of study based on "progressive word studies." The manual is intended for the use of teachers who use the book as a classroom textbook. In addition to providing for thorough work in spelling, the book gives suggestions for the mastery of pronunciation, the meaning, and the use-of words in script and in print. Such instruction leads the pupil to the ready and habitual use of the dictionary.

Important Events in European and American History. By F. E. Moyer. Paper, 64 pages. Price, 35 cents. Published by the Self-Test Publishing Co., New York City. The booklet offers a rather complete treatment of important topics in history which have been treated in newspaper dispatches and magazine articles, as well as important events in the history of the United States. Among the topics treated are The Dawes Plan, the League of Nations, the United States and Nicaragua, and The United States and Mexico.

COOPERATIVE SUPERVISION (Concluded from Page 68)

Every classroom teacher needs the stimulation which the spirit of investigation lends, needs growth from within and the sense of companionship in a common enterprise. Teachers do not need to be told things as they need to be stimulated to find out for themselves.

The poorest-paid teacher stands closest to the great problems and many offer, if properly stimulated, the largest contributions to educational investigations. The extravagant preference for ready-made methods, as distinguished from ever-developing method, is a sort of superstition with many educational teachers, principals, supervisors, and superintendents.

In conclusion, the principal that does not recognize the ethical law, the hunger for freedom, the spirit of human fellowship, the good of self and all, the spirit of adventure which exists between the one individual and another and governs the world of man, cannot supervise, no matter what authority he may happen to possess temporarily. If he cannot learn he cannot teach.

It is our business as principals to gain and to give, to train and to be trained, to stand in living ministration between supervisors and superintendent on the one hand and the teachers on the other, ever keeping in mind that our aim must never be self-seeking.

True leadership always means self-sacrifice and self-renunciation. It passes on ideas. It gives ideas but it doesn't claim them. It scatters seeds but it doesn't seek to reap the harvest. Let us make our schools clearing houses for educational opinion, training schools in educational discussion, centers for educational discussion.

From the halls of educational conference, and the offices of educational administration and supervision, we shall pass on. May our lives and our labors stand as inspiration and example to those who will take our places.

"By the steps that we have cut they will climb, by the stairs that we have built they will mount."

THE DENVER SCHOOL BUDGET FOR 1927-28

The board of education of Denver, Colorado, recently adopted a budget prepared by Supt. A. L. Threlkeld calling for a total expenditure of \$6.314,667 for school purposes. The amount is distributed to the various separate funds as follows:

neral e	ontrol	1												٠									. 8	169,443
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ordinat	e acti	viti	168																					86,240
xiliary	agene	cies																						34.500
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ted ch	arges.																							91,953
																								144,500
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The budget provides for the regular increases of teachers and principals. It also provides over \$630,000 for new buildings and equipment. To meet the increase in expenditures for this year, the tax levy has been increased .564 mills, making the total mill levy for the year, 14.364 mills.

LIBERAL SICK-LEAVE RULES IN BUFFALO

The board of education of Buffalo, N. Y., recently passed rules for sick leave, as follows.

Employees who have been in the school department not less than one year and not less than three years will receive full pay while on sick leave for one calendar month.

Those employed not less than three years and less than ten years will receive full pay for the first month of sick leave and half pay for the next five months; those employed for ten years or more will receive the same as those in the second classification and such further considerations as the board sees fit to give them from time to time.

These regulations do not apply to teachers alone but also to the other civil-service employees of the school department so that hereafter all will be on equal footing.

The board has adopted another rule that the maximum time limit in which teachers may receive pay on sick leave will be one year.

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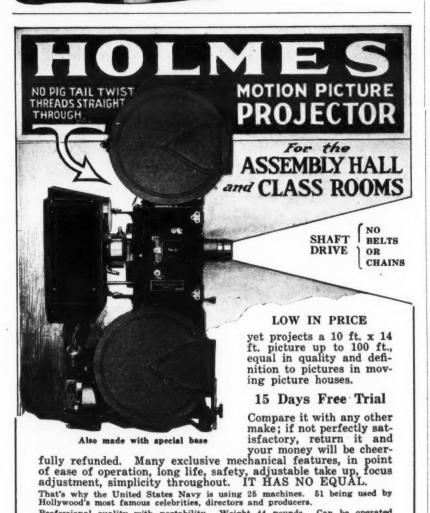
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By C. L. Thiele, Supervisor of Exact Sciences, Detroit Public Schools; Irene Sauble, Assistant Superintendent of Exact Sciences, Detroit Public Schools; and Nettie Oglesby, Second Grade Critic Teacher, Roosevelt Elementary School, Detroit Teachers College. Illustrated by Margaret Iannelli, Iannelli Studios, Park Ridge, Illinois.

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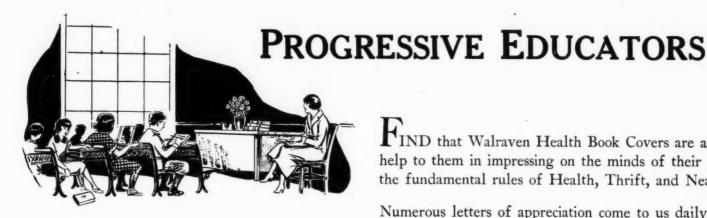
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Public-School Business Administration

By N. L. Engelhardt and Fred Engelhardt. Cloth bound, 1,068 pages. Published by the Bureau of Publications, Teachers' College, Columbia University, New York City.

Here is an important work. The authors have embodied their vast experience covering many years in the field of school administration into an exhaustive presentation and definite conclusions. They proceed upon the thought that "good business administration makes possible the advancement of the material needs of a school system, so that the educational program of each child may progress in the manner designated by the instructional and supervisory officers. . . . The expansion of educational expansion of educations are considered. cotional programs, increasing educational costs, and the greater complexities of organization have had their influence upon the concept of management. Lay members of boards of education have found it impossible to meet the increasing number of duties

The authors most wisely also hold that, "lay members of boards of education serving for the first time can only become familiar with the manifold duties and responsibilities of educational administration through a comprehensive treatise of the problems, which will confront them during their term of service. It is a courageous school-board member who attempts a solution in any field of enterprise without first becoming familiar with the recent researches which have helped in part to secure adequate solutions, and with the interrelations of each problem with every other problem of business management."

The entire range of school administration work is covered in thirty-five chapters. They enter into the principles and practices that must control in order to attain efficiency. Trends and tendencies are not overlooked.

Definite plans of organization for the management of a school system are presented, and the authors enter deeply into the subjects of fiscal control as well as into general school housekeeping.

The practical phases which enter into office management, account keeping, care and treatment of funds, the preservation and protection of plant values—all are adequately dealt with. There are chapters that go into the question of indebtedness, administration and control of bond issues, as well as into principles governing financial statements and reports, and the preparation of budgets. Attention, too, is given to subjects of textbook and storeroom management. The proper distribution of accounts in order to ascertain so-called cost finding, together with audit, research and survey considerations, are properly considered.

Attention is given to school-board organization and school-board committees. The book goes quite exhaustively into a study of the size of school boards, the rules and regulations that guide their deliberations, and the question of standing committees. There has been a tendency on the part of school boards in the smaller and medium-size cities to abolish all standing committees and permit all questions to be thrashed out in open board meetings. The studies made by such experts as W. S. Deffenbaugh, W. W. Theisen and H. S. Ganders are quoted.

The authors go into some detail to show exactly what the several committee functions are, their number and manner of reporting. Examples are provided showing how school boards of a given membership are split up into committee units. Here, of course, it is found that there is no particular uniformity as to a division of school-board

In assembling the material for this work the authors have shown marvelous discrimination in choosing the methods and procedures that are acceptable in the light of modern concepts in school administration. The evolution of the past quarter of a century has introduced new forms, or at least modified the old, in matters of organization and in a stricter division of the business and educational factors intrusted with a school system.

The appendices form an important part of this emarkable volume. They deal with the several forms deemed most serviceable in the presentation of financial statements, general records, budget estimates, proposals, audits, etc.

The bibliography, which lists 356 publications, mentions 57 articles which were published in the AMERICAN SCHOOL BOARD JOURNAL.

The Tired Child

By Max Seham, M.D., and Grete Seham, M.D. loth, 342 pages. Price, \$2. J. B. Lippincott Co., Cloth, 342 pages. Philadelphia, Pa.

This book is the work of Drs. Max and Grete Seham, who have prepared in concise form the various conditions acting singly or combined to produce chronic fatigue in infancy and childhood. The authors write in a clear though simple style, stressing the important points in such a way that not only the physician but the parent and teacher may have access to the material presented.

In the book the authors discuss not acute fatigue but chronic fatigue which expresses itself in feelings of tiredness and protracted diminution of one or more of the bodily functions. The material is divided into three parts. Part one deals with the elementary and fundamental principles of growth and development as well as with the psychology and physiology of work and efficiency in childhood. Part two discusses the nature, the causes, and the associated factors of fatigue. Part three lays emphasis upon the prevention and management of phasis upon the prevention and management of chronic fatigue as it comes within the realms of the parent, the school, and the teacher. A schedule of rational health habits is presented to be used as a standard for all normal children of school age.

The book will be found helpful to every parent and teacher who have in their keeping the care of a child and who desire to increase its physical and mental health and to insure the vigor of the future citizen. The book should find a place on the shelves of those who are interested in the pedagogic as well as the medical care of the infant and

American Indian and Other Folk Dances
By Mary S. Shafter. Cloth, quarto, 77 pages.
Price, \$3. A. S. Barnes Co., New York City.
This collection includes five Indian dances, four

American dances, a Mexican dance, and five dances of European origin. Complete directions and music are provided, and adequate information on the spirit of each dance is given to make its reproduction quite easy. With one exception the illustrations are examples of pictures which do not illustrate what they aim to portray.

Shug the Pug

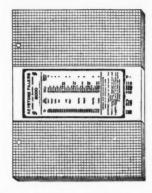
By Feza M. Reynolds. Cloth bound, 127 pages. Illustrated. Price, 70 cents. Published by Beckley-Cardy Company, Chicago.

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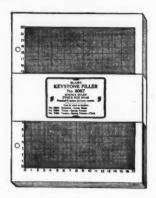
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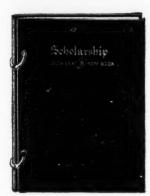




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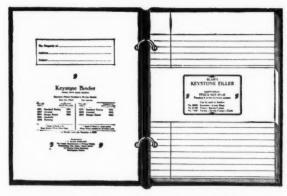




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The Brother Bears

By Anna Williams Arrett. Cloth bound, 125
pages. Price, 70 cents. Published by BeckleyCardy Company, Chicago.

The principal story deals with four little bears
who had their little joys and sorrows just as these
come to children. But there are also other stories.
There is one about Wee Willie Squirrel, another
about some little robins, and still another about a
funny hunny. funny bunny.

But the author also takes time to tell about Jimmy Jack-o'-Lantern, Billy's Pumpkin Pie, the Easter Flower Choir, Happiness Castle, etc. The text is set in large type and the pictures are in

Animal Pets

By Anna Bogenholm Sloane. Cloth bound, 110 pages. Price, 70 cents. Published by Beckley-Cardy Company, Chicago.

This is another of the series of children's books brought out by the Beckley-Cardy Company. It

contains some nineteen stories dealing with animal pets from near and far. Little lambs, rabbits, mice, goldfish, kittens and cats, canaries, hens and chickens, and even baby elephants and frogs run through the pages of the book in manner to please the child mind. The book is bound in an attractive cover, printed in large type and handsomely illustrated.

The Breed-French Speller

By F. S. Breed and William C. French. Cloth, 57 pages. Published by Lyons & Carnahan, Chicago.

This book is prefaced with an illuminating discussion on curriculum making in spelling. The authors proceed from the thought that the results scientific investigations cannot ignored curriculum construction, and hold that a textbook must comply with the later findings.

Thus, the gradation of words is approached with exceeding discrimination and the methods of study become more exact. A week's work is planned in such manner as to achieve the maximum results.

The lessons, which apply to the first and second grades, are arranged in progressive order, accompanied with suggestions to teachers, and ample review questions. These emphasize an understanding of the meaning of words as well as their spelling.

The Squirrel Tree

By Margaret J. McElroy and Jessica O. Younge. Cloth, 94 pages, illustrated. Published by the American Book Company, Chicago.

This book addresses itself to small children. The text, which is printed in large type, deals with child fancy, child play, and child work. The atmosphere is one of trees and flowers, of country rides and strolls, of parties and studies. The squirrel runs through it all with playful excitement and entertains and amuses with its antics and

The book is illustrated with colored pictures of the outline type—all neatly drawn.

Getting Well and Staying Well

By John Potts, M. D., with an introduction by B. McKnight, M. D. Cloth, 223 pages, Price, Published by C. V. Mosby Co., St. Louis, Mo. This book is addressed to tuberculous patients,

public health nurses, and doctors. It contains the information that should be known by tuberculous patients, their families, and physicians. The author maintains that tuberculosis work is

teaching work, and that everything that doctors learn about the disease should be translated into layman's language for layman's use. The important subjects covered are suspecting tuberculosis, the diagnosis, learning tuberculosis, the sanitarium, sanitation, routine, quackery, signs of improvement, happiness or regret.

Manual of Everyday Reading

Teachers' manual for books one, two, and three. By Henry C. Pearson and Charles W. Hunt. Paper, 141 pages. Published by the American Book Company, New York City.

This book reflects in an interesting way not only progress which is being made in the teaching of silent reading but also in the specific aid which needs must be given to the teacher in using the newest textbooks. The method of the manual is excellent. The reviewer is inclined to disagree with the author in the selection of some of the books recommended for the class library.

Nations of the World

B

A pageant. Prepared by the faculty of Public School 53, Buffalo, New York. Cloth, 46 pages, illustrated. Price, \$2. Published by A. S. Barnes & Company, New York City.

This book has been designed to show what the important nations of the world have contributed to civilization, and especially what the United States has contributed. The pageant is based on fact, is pleasurable and colorful, as well as educational. The pageant has been successfully produced. It may be adapted to a large or small number of actors, and can be produced in schools or communities.

The New Technic of Teaching Primary Reading Paper, 31 pages. Published by the Wheeler Publishing Co., Chicago.

This booklet is intended for the use of teachers in the beginning stages of reading. It offers suggestions to teachers in teaching the Child's Own-Way Series, taking up in particular individual in-struction, pre-primer work, seat work, phonics, kindergarten and home background, and library

New Type Questions in Chemistry

By Charles E. Cook. Octavo, 106 pages. Price, 80 cents. Globe Book Co., New York City.

The splendid movement for objective testing in

all subjects in the elementary and secondary schools has produced a large amount of literature outlining principles and methods of testing. A vast amount of material has been provided in individual subjects suggesting how the general principles and methods can be applied definitely to these subjects.

The present book shows how these established types of objective testing can be applied to chemistry to make the teaching of the subject more efficient and the examinations more accurate. The author provides a complete series of tests, covering the entire range of the subject as now taught in secondary schools. The book is suggestive and should be most helpful for any teacher.

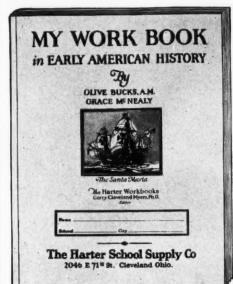
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Porto boards, 446 pages. Price, \$3. Published by the Sheet Steel Trade Extension Committee, Oliver Bldg., Pittsburgh, Pa.

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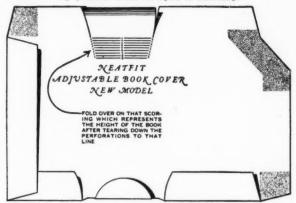
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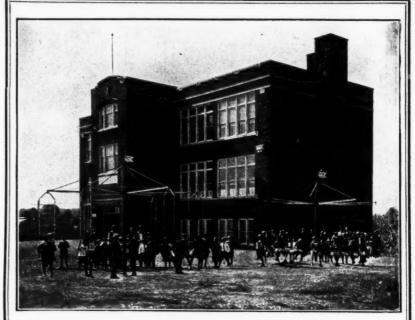
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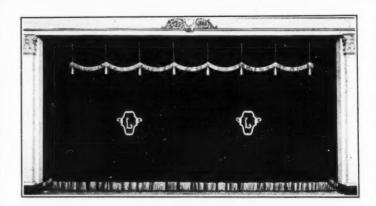
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(Concluded from Page 150) school-board purchasing departments who are engaged in the purchase of products involving sheet metal.

1927 Yearbook of the Southwestern Educational

Research and Guidance Association Edited by W. W. Clark. Paper, 59 pages. Pub-shed by The Research Service Company, Los lished by The Angeles, Calif.

Contains the proceedings of the sixth annual conference and papers on various important aspects of educational research.

Special Day Pageants for Little People
By Marion Kennedy and Katharine Bemis.
Cloth, 48 pages. Price, \$1.50. Published by A. S.
Barnes & Co., New York City.

A collection of 21 pageants suited for the particular school holidays are outlined in this book with complete directions concerning stage management, costumes, etc. At least two of the pageants appeal to the reviewer as having quite missed the correct significance of the days observed. Hallowe'en has no meaning if its religious significance is forgotten, and Christmas is incomplete if the Christ-child is eliminated from its observance.

Cornelli By Johanna Spyri. Cloth, 304 pages. Price, \$1.50. Published by Thomas Y. Crowell Company,

Children who enjoyed Spyri's Heidi will be delighted with this book. It is written very much in the same vein and concerns the adventures of a poor little girl who finds happiness.

Practical Football By G. S. Lowman. Cloth, 280 pages. Price, \$4. Published by A. S. Barnes & Co., New York City.

High-school coaches will appreciate this com-plete professional work which takes up every aspect of the subject from the training and conditioning of the players to the treatment of injuries and scouting for players. The technic of the game, as well as play tactics are fully discussed.

The Magic Clothes-Pins
By Maude D. Lynch. Cloth, 106 pages. Price, cents. Published by Houghton-Mifflin Co.,

Boston, Mass. A story in verse of a little regiment of soldiers composed of clothespins, which made the illness of a little boy a time for happy, imaginative advenFundamentals of German

By Adolph E. Meyer. Cloth, 164 pages. Price, Published by the Globe Book Co.

This book provides a systematic review of the principles of German grammar which are necessary to a working knowledge of the language. It is intended to be of help to teachers of second- and thirdyear classes in review work and as a supplementary text in first-year classes. The topical arrangement of the subject matter permits a rather flexible method of class study. The last part of the book offers translations of English into German, some miscellaneous questions, and a vocabulary.

Sixth Grade Arithmetic Practice
By F. M. McMurry and C. V. Benson.
Paper, 124
pages. Published by The Macmillan Co., New York City.

This book provides 98 practice or drill lessons and 98 diagnostic lessons. The first group of material is intended to provide the drill supplementing the formal textbook work, and diagnostic lessons are intended to show the children very clearly their weaknesses in each of the typical fundamental

Picturesque Porto Rico
By Elizabeth Kneipple Van Deusen. Cloth bound,
291 pages. Published by Silver, Burdett & Company, New York City.

This book tells in story form many interesting things about Porto Rico. The stories introduce types of people, local customs and conditions. and give some idea of the beauties of the island. There are also ballads, sonnets, and other poemsflecting the spirit and lives of the island inhabi-

The stories are delightful as a record of the lives of a simple people who have enjoyed a tropical abundance in a small land where old Spanish culture has mingled with primitive conditions and where limited needs have been easily satisfied. The coming of a government of an Anglo-Saxon nation has in recent years enlivened the island with new viewpoints, new industry, and education, and has caused numerous changes in customs, habits, and outlook on life. It is difficult to say which type of story is the more interesting, the story of old Porto Rico-like that of the basket maker who learned wisdom from the silent owl-or of the new Porto Rico-like that of the ferryman who foresaw

ruin in the building of a bridge only to find prosperity in a tiny store which he opened at the bridgehead.

Laboratory Experiences in Practical Chemistry By Newton Henry Black. Cloth, 188 pages. The Macmillan Company, New York City.

This is a revised edition of the author's book on the same subject published in 1920. The experi-ments, the author explains, are so arranged as to accompany the revised edition of Black and Corant's

Practical Chemistry.

The directions for the several experiments are at first quite detailed but are gradually abbreviated so as to leave more room for the student's imagina-tion and initiative. In arranging the studies the author bears in mind the actual amount of work the student may successfully accomplish.

The text is chapterized into a series of experiments, amply illustrated, and accompanied with explanatory notes. The appendix enumerates the chemicals and instruments employed.

We and the World
By William C. Redfield. Cloth bound, 194 pages.

Published by Silver, Burdett & Co., Boston.

A manufacturer, who incidentally is a man of great cultural attainments, and who served his country as a cabinet officer with emirent ability, has written a book. He cast his eye over the world's activities and discovered many interesting and instructive things which he believes ought to come within the knowledge of the American school

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While the book is the work of a statesman, it has also the touch of the schoolmaster as well. The editors, Harlan H. Barrows and Edith Putnam Parker, have adapted the text to school use.

work in the high school.

Essentials of Spanish
By Arturo Torres. Cloth, 414 pages. Published by Doubleday, Page & Co., Garden City, New York. Provides a well-balanced course for the first-year



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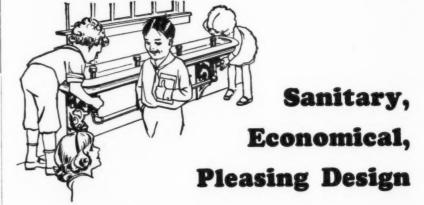
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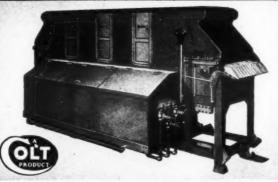
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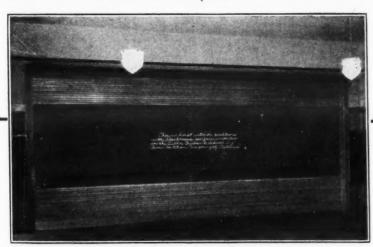
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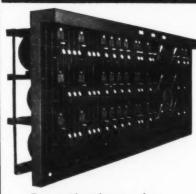


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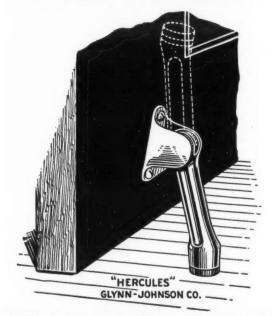
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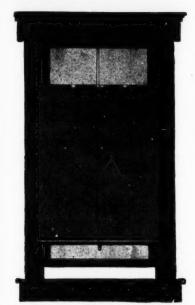
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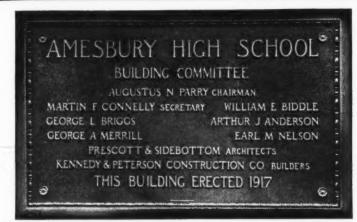
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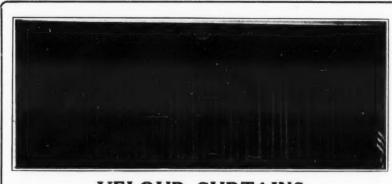
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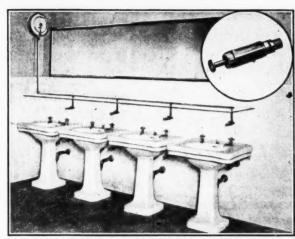
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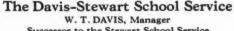
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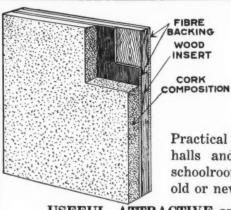
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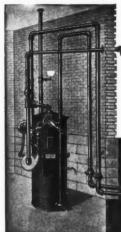
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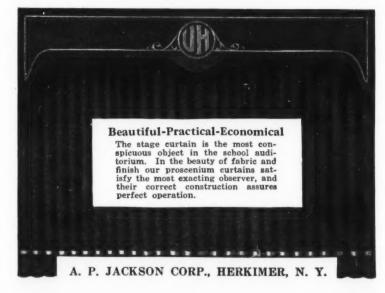
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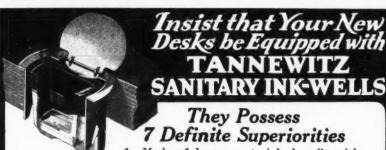
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SIDE STEPPING THE INTRODUCTION W. S. Coy, the genial secretary for the Ohio Teachers' Reading Circle, is responsible for the following story that comes from Athens county, Ohio. So often speakers are introduced in such

Ohio. So often speakers are introduced in such glowing terms that even the most sophisticated folk blush. It is a problem just what to say after a glowing introduction.

H. R. McVay, the well-liked superintendent of Athens county schools, is known all over the state of Ohio for his wealth of words and his ability to use them when introducing a speaker. He did his best when he introduced Superintendent Meek of the Toledo schools at his county institute. praises of Meek reached the vaulted skies. It was, indeed, a most "glowing" tribute.

Meek answered it, and answered it well. He said that there were three things that were always hard to do, "To climb a fence leaning toward you, to kiss a girl leaning from you, and to respond to an introduction like that."

THE SCOTCHMAN PAYS

Recently William McAndrew, superintendent of the Chicago schools, and Chas. Meek, superintend-ent of the Toledo schools, were dining together at a hotel in Toledo, Ohio. Following the meal there was the usual struggle for the dinner check. It was a struggle between a Scotchman and a man who was not Scotch. You, of course, by now have drawn your own conclusion as to who gathered up the dinner checks. You lost. That Scotchman, McAndrew, won, and he won according to Meek with this striking sentence, "When a Scotchman wants to pay for a dinner—let him."

THE RIGHT TO CHANGE AND CAREFUL SLANG SELECTION

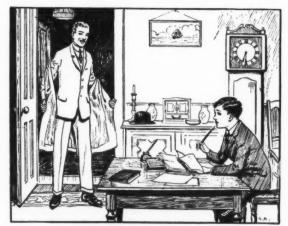
G. M. Wiley, superintendent of schools, La Crosse, Wisconsin, is willing to take a few minutes' time to tell some humorous incidents taken from life.

His first story, of a woman who did her own thinking in spite of peanut politicians, is often duplicated and is one of the reasons why the motto, "You can never tell," is so popular when it comes to a school fight.

The second story of a well-trained lad is charming for the diplomacy shown by the youngster, and still gives us ample reason to believe that after all the home does do some training.

Here is Wiley's own "introduction" and stories: You have asked quite a bit of a Scotchman. I, of course, appreciate all of my own jokes but am not certain of the appreciation of the second party. Here is a little story that has a school

application:
"A small-town school meeting was called, consisting of the patrons of a little village. The question was up concerning some improvements in school building and equipment which would involve, of the expenditure of some additional funds. Two groups, of course, were represented. After various speakers had spoken on each side of the question, one of the leaders turned to a woman of considerable prestige and wealth of the district who had so far remained silent. He felt, of course, that she would speak against the improvements which meant the additional expenditures. When



Overtime Home Study Thank goodness that's over. It's been a Father:

long day, Harry.
Son: You're lucky, dad. I've got three hours to put in yet .- Teachers' World, London.

called upon she took the floor and in a very forceful way took the side of the improvements and additional expense. The gentleman was amazed that she took this stand and asked her to explain to the meeting why she would advocate these improvements with the additional expense which would, of course, increase her taxes more than anyone else in the district especially since all of her children were educated and had left the community. Her explanation was very brief and to the point. replied: 'I realize all that you have said, that these improvements will cost something in the way of taxation, and my reason for supporting this, since you have requested it, is this: Of course, I realize my children are gone but I have planned to remain in this community the rest of my days and I realize that I am going to have to live with your chil-

"I have another little personal story that came within the family circle:

"My little nephew was trained by his mother to clear of profanity and words bordering on the same. In other words, he was trained to use gosh rather than 'damn if either were necessary. This little chap was riding down to the city one morning with his mother and he passed a milldam. Hanging on this milldam was a log that attracted the youngster's attention and he said, 'Oh mother, see the log hanging on the —— gosh."

She Waited
Ellen, four, had just returned home after her first morning in kindergarten.

"Well," asked her mother, "how did you like it?"
"I didn't like it at all," she replied. "The woman put me on a chair and told me to wait there for the present-

"Well," interrupted her mother, "wasn't that all right?"

"But," continued Ellen, "she never gave me any

An overgrown negro boy who could not keep up with his class, was being tested in the psychological clinic of the Cincinnati schools.

"Do you ever hear voices and sounds without being able to tell who is talking or where they come from?"
"Yassah." said the boy.

"And when does that happen?"
"Ebenings, ober the radio."

The Essence of It Tommy: History is hell!

Teacher: Tommy!

Well, it says here that Sherman said, 'War is hell," and war makes history.



KEWANEE BOILERS FOR SCHOOLS

The Kewanee Boiler Company of Kewanee, Ill., has issued its new catalog No. 81, describing and illustrating its smokeless steel boilers for schools and other public buildings. The boilers have won wide acceptance because of their spacious fireboxes. ample heating surface, and low temperature chimney gases. These elements added to stability, a wide variety of fuels, and long life, have made school authorities consider them especially school-building use.

The catalog offers complete measurements and specifications for brick-set types of boilers, portable types of boilers, oil-burning boilers, down-draft K boilers, and up-draft K boilers.

The firm also publishes separate catalogs on steel water-heating boilers, high-pressure boilers, water heaters, and radiators.

School officials and architects who are interested in Kewanee steel boilers may obtain further information by writing to the firm at Kewanee, Illinois. COOPERATIVE PURCHASING OF SCHOOL

SUPPLIES Mr. W. J. Savage, district superintendent of schools at Daly City, California, writing in the November issue of the Sierra Educational News. discusses the cooperative purchasing of school supplies as it is carried out in California under a new law. Mr. Savage calls attention to the fact that "for a number of years those educators in California who gave special attention to policies endeavored to have a law passed by the legislature making compulsory the purchase of school supplies in cooperative fashion, either through the office of the existing county pur-



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chasing agent or more specifically under the supervision and direction of the county superintendent."

Mr. Carter continues: "The Carter bill, passed at the last session, has this for its object; it provides that all districts except those of the first and second class and all high schools, must submit a list of their requirements to the county superintendent of schools, who may in those counties having a purchasing agent, direct that the purchases he made through him.

"It was assumed that by this purchasing in bulk large savings would be made and that the purchasing agent would be able to command better competitive prices, the savings to accrue to the taxpayers and to the betterment of the smaller schools thus affected.

"Like many ideas for civic improvement it was based largely on theory; it failed to take into account that while some saving might be made in the initial purchase the cost of putting the plan into effect, including the distribution of the merchandise after purchase, would more than offset the possible saving. While it is too early to estimate fully the success of the new plan it appears so far to have resulted more in delays and confusion than in actual saving or increased efficiency.

"The law does not become effective until February, 1928, but several counties have taken advantage of the stimulus toward cooperative buying and the permission or suggestion offered by the measure to apply its provisions to this year's purchases.

"No provision was made in the bill for increased compensation or additional clerical help in the office of an already overworked superintendent of schools; the plea of economy on which the measure was based would preclude such action, yet the average superintendent finds it is impossible to give the subject the attention it demands without neglecting the more important factor of educational supervision for which he is elected.

"Many trustees, elected to a position of trust and confidence in their community resent their implied unfitness to conduct the affairs of their district as they see fit. Many teachers object to being compelled to use the inferior materials usually purchased with the sole view to saving

"The sale of school supplies, whether by the larger corporations or the smaller dealer in the local town, has always been highly competitive and the profit in that line of business, considering the extremely long terms of payment usually exacted are not exorbitant or even attractive, which is proved by the large number of concerns in this state who have either failed or gone out of the business.

"For the individual county, through whatever system or channel may yet be devised, to attempt to enter successfully the business of supplying the schools is questionable policy to say the least. We express the hope that the experiment may result in savings of a reasonable character without detriment to the welfare of the schools a whole, but at the present moment the wisdom and success of the plan is open to serious doubt. Personally, I am a firm believer in open com-

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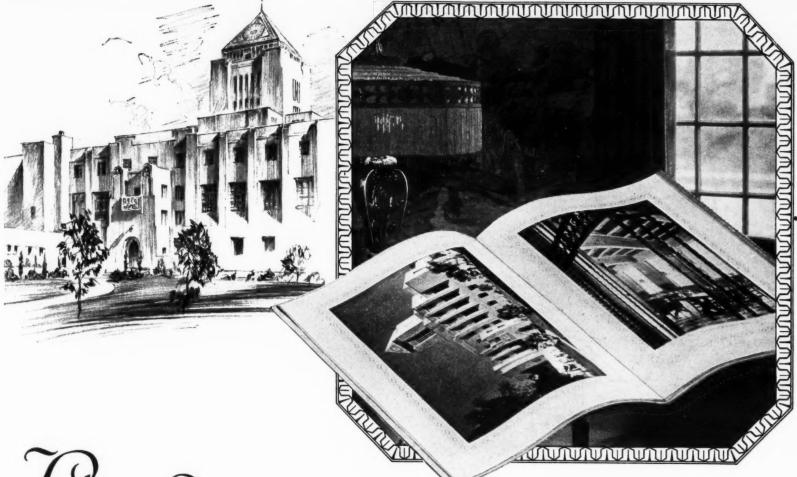
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Year by Year

THE

National Preference for LYON Steel Lockers Grows Stronger

Building for the future is the common thought of both those who produce Lyon Steel Lockers and those who buy them. In the experience and judgment of those who know them, Lyon Steel Lockers are as lasting as the buildings in which they stand. Consequently, a preference for Lyon Steels Locker predominates from border to border across the entire breadth of the nation.

No other locker has a door so rigid as a Lyon door, with the double thickness of its flanged edges, its electrically welded corners and its full length V-shaped reinforcements. Its full-looped hinges act as a door stop and are so strong that a man can not spring a door back against the locker next in line.

The comparatively quiet





locking device has been tested with the equivalent of 165 years of use and still works dependably.

The rigid frame is of angle steel, welded into a unit. The vertical rear corners have a double thickness of steel their entire height. The handsome green enamel finish proves, under the severe "hammer test," that it will have a long future, even with school boy use.

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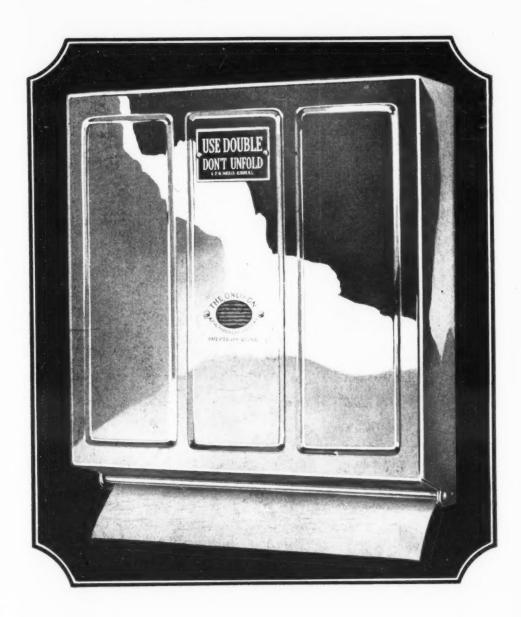
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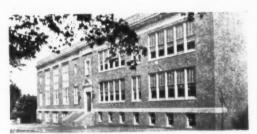
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